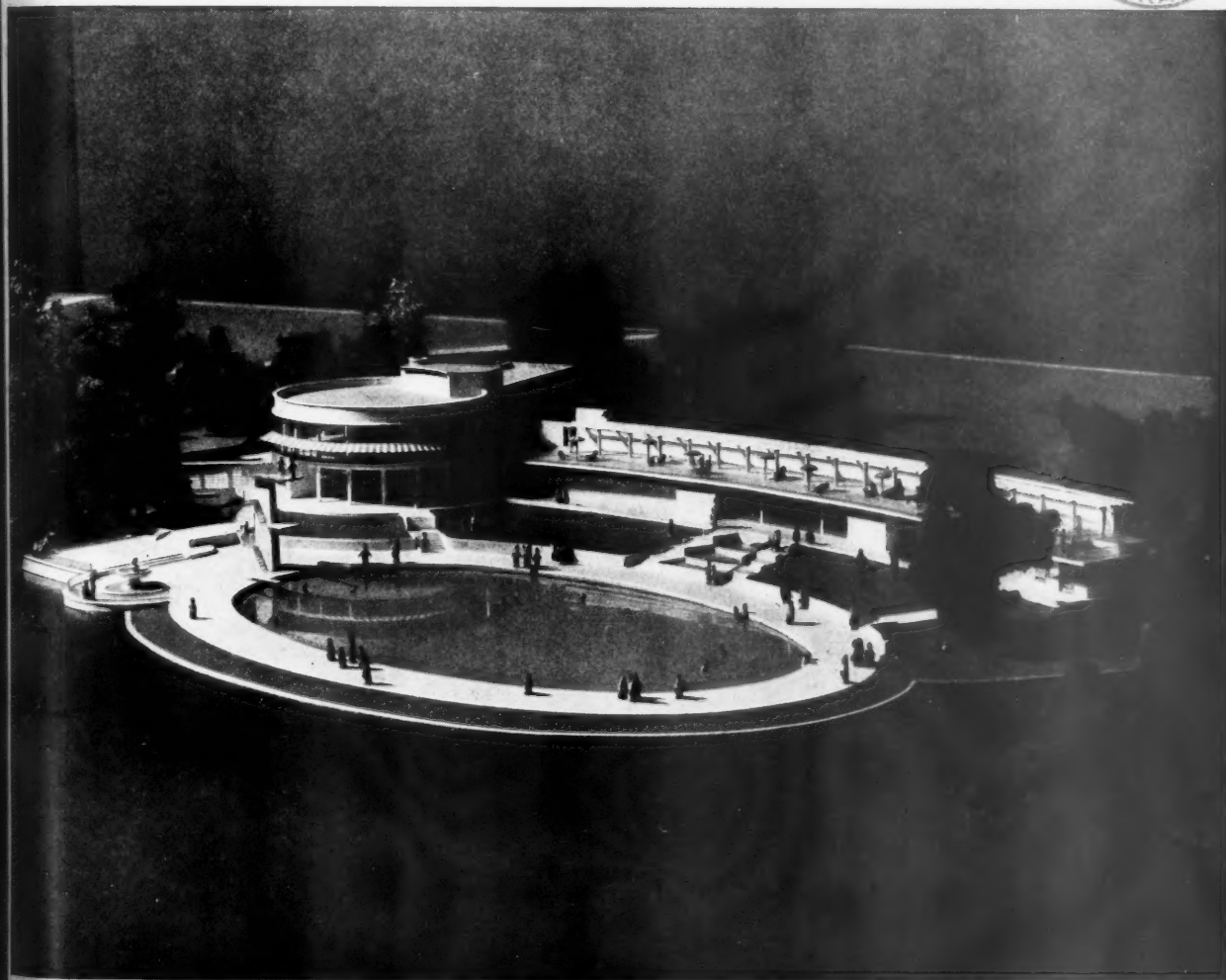


THE JOURNAL OF THE
ROYAL INSTITUTE OF
BRITISH ARCHITECTS

66 PORTLAND PLACE LONDON W1 • TWO SHILLINGS AND SIXPENCE



Model of the proposed swimming pool and cafeteria, Regent's Park, London. By a group of Ministry of Works architects under C. Terry Pledge [A]

Two Shops, Moor Park, North Shields, for County Borough of Tynemouth

BRODERICK INSULATED COPPER ROOFING

ON PREFABRICATED FRAMING

IS READILY AVAILABLE

Detail of Nailed Trussed Timber Rafters at 2'0" c.c. NO REQUIRED * 30 Scale 3/4" = 1 Foot
Broderick Insulated Structures Ltd., Woking, Surrey. Working Drawing No. W. 65



Shops at Moor Park, North Shields, for County Borough of Tynemouth.
D. M. O'Herlihy, B.Sc.(Eng.), M.Inst.C.E., Borough Surveyor.
J. W. Leatham, A.R.I.B.A., Chief Assistant Architect.
BRODERICK INSULATED COPPER ROOFING at 20 deg. pitch.

FOR HOUSES,
SHOPS, FLATS, SCHOOLS,
WORKSHOPS, OFFICES, ETC.

ADVANTAGES

Long life	Fully insulated	Saves timber
Light weight	Good appearance	Saves brickwork
Low cost	Rapid erection	Saves transport
Low maintenance	Earlier completion	Saves site hours

BRIEF DESCRIPTION

Roofing Panels. TenTesT Insulating Board 1 in. thick, 2 ft. wide and up to 12 ft. long, faced at factory with light gauge copper. Any gauge of copper can be used, normal thickness 33 gauge, total weight 2 lb. sq. ft.

Roof Framing. Standard construction is factory made timber trussed rafters, designed on timber engineering principles, and spaced at 2 ft. 0 1/2 in. centres, complete with ridge, wall-plates, fascia boards, noggings, etc. Any other construction providing light timbers at same centres is suitable.

Timber Economy. Our standard construction uses approximately half the timber used in tiled roofs of normal pitch. On standard housing the saving is about 40 cu. ft. per house.

Pitch. For economy about 15 to 20 deg. Not normally suitable for flat roofs.

Roof Slope. Any length of slope from ridge to eaves over 12 ft. can be covered by jointing panels end to end in situ.

Speed of Erection. Four men can erect complete roof framing, roofing and flashings on a pair of houses in five days or less.

Cost. Near London, average 41/6 sq. yd. of roofing area including roof framing. Flashings, etc., extra. Estimates submitted on receipt of drawings.

Thermal Insulation. "U" value with 1/2 in. TenTesT ceiling 0.17; with 3/8 in. plasterboard ceiling 0.21; no ceiling 0.27.

Information Sheet on request

TO ENSURE SATISFACTION WE SUPPLY AND FIX COMPLETE

BRODERICK INSULATED STRUCTURES LTD.

41 MOUNT HERMON ROAD, WOKING, SURREY. Telephone : WOKING 1999



THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES VOL 55 NUMBER 9 : JULY 1948 : 66 PORTLAND PLACE LONDON W1 : TWO SHILLINGS & SIXPENCE

377 ANNUAL ELECTION RESULTS	393 HOUSING CONFERENCE—THE PRACTICE OF THE LEEDS CORPORATION, R. A. H. LIVETT	415 BRITISH STANDARD SPECIFICATIONS AND BRITISH STANDARD CODES OF PRACTICE—EDWARD D. MILLS
379 EDITORIAL		
379 UNVEILING OF SECOND WORLD WAR R.I.B.A. WAR MEMORIAL	399 HOUSING CONFERENCE—HOUSING IN RURAL AREAS, G. A. JELlicoe	416 REVIEW OF CONSTRUCTION AND MATERIALS
381 CONFERENCE ON HOUSING LAYOUT IN THEORY AND PRACTICE, PART I—ADDRESS BY MINISTER OF HEALTH	403 QUESTIONS AND ANSWERS IN PRACTICE—CHARLES WOODWARD AND SYDNEY REDFERN	417 PRACTICE NOTES
384 HOUSING CONFERENCE—APPLICATION OF PRINCIPLES IN LAYOUT, J. H. FORSHAW	408 MODELS IN THE OLYMPIC GAMES FINE ARTS COMPETITIONS	420 BOOK REVIEWS
389 HOUSING CONFERENCE—MODERN REQUIREMENTS OF RESIDENTIAL DEVELOPMENT, S. L. G. BEAUFOY	412 WILLIAM KENT AND HIS DRAWINGS—S. ROWLAND PIERCE	422 CORRESPONDENCE
		423 NOTES AND NOTICES
		426 NOTES FROM THE MINUTES OF THE COUNCIL
		427 REVIEW OF FILMS
		427 MEMBERSHIP LISTS
		428 MEMBERS' COLUMN

Annual Election Results

Report to the Chairman of the General Meeting, 22 June 1948

The Scrutineers appointed to count the votes for the election of the Council for the Session 1948-49 beg to report as follows:

3,296 envelopes were received—734 from Fellows, 1,834 from Associates, and 728 from Licentiates.

The result of the election is as follows:

COUNCIL, 1948-49

President:

MICHAEL THEODORE WATERHOUSE (unopposed).

Past-Presidents:

HARRY STUART GOODHART-RENDEL (unopposed).

SIR LANCELOT HERMAN KEAY (Liverpool) (unopposed).

Members of Council:

Elected	Votes
1. CECIL GEORGE STILLMAN	1,804
2. THOMAS CECIL HOWITT	1,381
3. VICTOR BAIN	1,284
4. JOHN SWARBRICK	1,109
5. CHARLES HERBERT ASLIN	1,052
6. ARTHUR BEDFORD KNAPP-FISHER	1,024
Not Elected	Votes
7. ANTHONY MERLOTT CHITTY	966
8. CHARLES HOLLOWAY JAMES	905
9. HOWARD VICARS LOBB	727
10. ROBERT FURNEAUX JORDAN	654
11. DENIS WINSTON	598
12. NORVAL ROWALLAN PAXTON	570
13. HAROLD CONOLLY	545
14. CYRIL FREDERICK MARTIN	543
15. FRANK REGINALD STEELE	510
16. CLIFFORD EWART CULPIN	456
17. WILLIAM GEORGE DAVIES	450
18. ALEXANDER ROBERT FORDYCE ANDERSON	403
19. ALFRED HERBERT GARDNER	399
20. HUGH GREVILLE CASTLE SPENCELY	399
21. JOHNSON BLACKETT	385
22. CECIL GEORGE KEMP	349
23. RICHARD GREAVES BROCKLEHURST	330
24. OLIVER LAW	310
25. CHARLES FREDERICK BLYTHIN	146
26. NOEL LEES REECE	141

3,261 Voting Papers were received, of which 3 were invalid.

Associate Members of Council:

Elected	Votes
1. PROFESSOR JOSEPH STANLEY ALLEN	1,398
2. COLIN TROUGHTON PENN	1,263
3. RICHARD ALFRED HARDWICK LIVETT	924
Not Elected	Votes
4. JOHN ROBERT ATKINSON	783
5. HENRY THOMAS CADBURY-BROWN	720
6. JOHN HARRISON	586
7. JOHN LEWIS WOMERSLEY	509
8. ALWYN GWILYM SHEPPARD FIDLER	499
9. ANTHONY POTT	428
10. MAURICE EWAN TAYLOR	337
11. PERCY EDWIN ALAN JOHNSON-MARSHALL	283
12. WALTER BARRETT	274
13. JOHN WILLEY POLTOCK	270
14. HAROLD BRUCE ALLSOPP	232
15. JUSTIN HENRY ALLEYN	195

3,221 Voting Papers were received, of which 7 were invalid.

Licentiate Member of Council:

Elected	Votes
1. BERNARD HUGH COX	1,237
Not Elected	Votes
2. JOHN CLAY	423
3. FRANK MOWBRAY RUTTER	323
4. FREDERICK CHARLES WAKEFORD	287
5. HARRY NORMAN HAINES	254
6. THOMAS SIBTHORP	127

2,683 Voting Papers were received, of which 32 were invalid.

Representatives of Allied Societies in the United Kingdom or the Irish Free State

(1) Six Representatives from the Northern Province of England

FREDERICK AUSTIN CHILD (Northern Architectural Association)
PHILIP GARLAND FAIRHURST (Manchester Society of Architects)
PROFESSOR LIONEL BAILEY BUDDEN (Liverpool Architectural Society)

ALBERT NEWTON THORPE (York and East Yorkshire Architectural Society)

One Representative to be nominated by the West Yorkshire Society of Architects

IN MEMORY OF MEMBERS STUDENTS AND STAFF WHO LOST THEIR LIVES IN THE WAR

1 9 3 9 - 1 9 4 5

Honorary Associates: S. CASSON · R. J. WHISTLER · **Fellows:** H. BURLEIGH · D. H. BURLIES · H. C. FARMER · L. G. FARQUHAR · H. L. FOX · C. B. MARSHALL · W. G. PARKIN · J. N. RIVINGTON · Q. WILSON
Associates: W. RANNAN · H. G. ATKIN-BERRY · B. H. BATT · H. BENNETT · J. M. BILLING · R. B. BINYON · R. B. BRADLEY-BARKER · S. W. BRADSHAW · R. BROAD · B. J. BROWN · G. H. BROWN · A. D. BROWNE · J. N. G. BRUCE · F. J. BUCKLAND · A. K. BURTON · P. E. BUSHELL · J. C. CANNON · R. J. CARTER · H. H. CASTLE · D. CHAPPELL · E. A. COCHRANE · J. B. COCHRANE · R. H. COLES · F. W. COUSINS · D. M. CRAIK · G. K. CROWE · E. E. DAVIS · J. H. DEAS · E. DELSON · D. M. DENT · E. C. DOBSON · J. C. EDGAR · O. K. FISHER · A. S. FOSTER · C. C. FRASER · H. GOOLDEN · H. GORDON · D. A. GREEN · E. W. GRIFFITHS · J. A. GRUNDY · J. L. HALLIDAY · I. HAMILTON · V. HARDING · C. N. HARDMAN · M. A. HARLAND · T. C. HICKS · R. W. HIGGS · H. H. HOBDAI · E. M. HOOPER · C. W. INGLIS · W. E. JOHNS · J. B. JOHNSTON · J. R. JONES · W. E. KELLY · H. R. LANCHESTER · J. A. Le ROSSIGNOL · A. P. LEVY · P. H. LEWIS · B. LOCKE · E. M. McINTYRE · A. N. L. McQUEEN · O. D. G. MANNING · O. J. C. MASON · R. H. MATTHEWS · A. J. MEDCALF · C. S. MORLEY · J. C. PATON · N. PERRY · H. R. D. PERRYER · J. E. POTTER · R. P. QUENNEL · M. RATHMELL · A. L. B. RAVEN · G. S. RICHARDSON · H. S. RILEY · A. A. ROBIN · P. H. D. RONALDSON · H. E. A. SCARD · R. W. SHERWIN · C. H. SHORT · H. R. K. SMITH · W. C. TAFFENDER · B. W. R. THOMAS · N. THOMAS · D. R. N. TOOTH · R. B. VERDON · C. C. G. WEBB · O. S. WEISS · J. S. WESTCOTT · J. WHEELER · H. E. WILSON · G. WOOD · T. B. WRATHMELL

- One Representative to be nominated by the Sheffield, South Yorkshire and District Society of Architects and Surveyors.
- (2) *Five Representatives from the Midland Province of England*
 FRANK JOHN OSBORNE (Birmingham and Five Counties Architectural Association)
 One Representative to be nominated by the Leicester and Leicestershire Society of Architects
 One Representative to be nominated by the Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects
 ROBERT EDWIN MONTAGU COOMBS (Nottingham, Derby and Lincoln Architectural Society)
 MARTIN JOHNS SLATER (East Anglian Society of Architects)
- (3) *Six Representatives from the Southern Province of England*
 CYRIL LLOYD JONES (Devon and Cornwall Architectural Society)
 WILLIAM GODFREY NEWTON (Wessex Society of Architects)
 HAROLD FRANCIS HURCOMBE (Berks, Bucks and Oxon Architectural Association)
 ERNEST BIRD (Hampshire and Isle of Wight Architectural Association)
 One Representative to be nominated by the Essex, Cambridge and Hertfordshire Society of Architects
 One Representative to be nominated by the South-Eastern Society of Architects
- (4) *Four Representatives of Allied Societies in Scotland nominated by the Council of the Royal Incorporation of Architects in Scotland*
 LESLIE GRAHAME-THOMSON (Edinburgh)
 LOCKHART WHITEFORD HUTSON (Hamilton)
 ALEXANDER GEORGE ROBERTSON MACKENZIE (Aberdeen)
 ALFRED HUGH MOTTRAM (Edinburgh)
- (5) *One Representative of Allied Societies in Wales nominated by the Council of the South Wales Institute of Architects*
 GORDON HERBERT GRIFFITHS (Cardiff)
- (6) *Two Representatives of Allied Societies in Ireland*
 FRANCIS MCARDLE (Royal Institute of the Architects of Ireland)
 One Representative to be nominated by the Council of the Royal Society of Ulster Architects

Representatives of Allied Societies in the British Dominions Overseas
To be nominated by the Councils of each of the following:
 The Royal Architectural Institute of Canada.
 The Royal Australian Institute of Architects.
 The New Zealand Institute of Architects.
 The Institute of South African Architects.
 The Indian Institute of Architects.

Representative of the Architectural Association (London)
 RODERICK EUSTACE ENTHOVEN

Representative of the Association of Architects, Surveyors and Technical Assistants (now the Association of Building Technicians)
 KENNETH JOHN CAMPBELL

Chairman of the Board of Architectural Education
 MARTIN SHAW BRIGGS

Chairman of the R.I.B.A. Registration Committee
 DARCY BRADDELL

Two Representatives of the R.I.B.A. Salaried and Official Architects' Committee
 (To be appointed)

Chairman of the R.I.B.A. Allied Societies' Conference
 ANDREW GRAHAM HENDERSON (Glasgow)

Honorary Auditors
 CECIL BURNS (unopposed)
 BRIAN PEAKE (unopposed)

Scrutineers

C. J. EPRIL, *Chairman*
 JOSEPH F. DIXON
 E. TOM SARGENT
 JOHN A. WHITTAKER
 CHARLES SYKES
 F. L. HYETT
 R. BETHAM
 HOWARD L. KELLY

H. A. J. BARLOW
 PETER BERNER
 G. H. FIELDER
 F. S. ALEXANDER
 H. VICTOR KERR
 CECIL H. PERKINS
 E. D. LYONS
 G. A. COOMBE

OFFICERS FOR THE SESSION 1948-49

Vice-Presidents

CHARLES HERBERT ASLIN
 ARTHUR WILLIAM KENYON, C.B.E.
 ARTHUR BEDFORD KNAPP-FISHER, F.S.A.
 ARTHUR GRAHAM HENDERSON, A.R.S.A.

Hon. Secretary

ARTHUR LEONARD ROBERTS

Hon. Treasurer

JOHN LEOPOLD DENMAN, J.P.

IN MEMORY OF MEMBERS STUDENTS AND STAFF WHO LOST THEIR LIVES IN THE WAR

1 9 3 9 - 1 9 4 5

Licentiates: T. SATHRON · D. BETHUNE-WILLIAMS · E. P. COOPER · R. C. BADANIEL · G. NELLIS · C. W. GEDDES · J. D. GREEN · S. AHAMID · F. H. LAND · H. A. MANSEY · C. D. PICKERSGILL · G. A. W. SMITH · J. H. F. STEWART · C. W. WARR · E. A. WARREN · K. G. WITHERS *Students:* R. A. LABASTER · J. H. VARBIB · J. PARCHER · G. W. ARNOLD · A. R. B. BALL · L. BALL · C. J. EBOUSTEAD · G. ABOZIER · A. BREMNER · P. W. BROCKLESBY · J. C. BUCKLEY · A. C. CARIS · F. CLARK · D. H. CLAYE · B. J. CLINGING · D. C. COLAHAN · W. G. CONNELLY · L. A. L. COOK · R. T. COULTON · L. COURTNEY-LAVER · T. COWAN · W. H. DIMMOCK · A. DOUGLASS · J. B. DUNCAN · P. C. EDWARDS · J. H. ELLIOTT · O. J. FOGARTY · J. FOLEY · J. D. GAYTON · M. J. GILES · L. R. GOAD · W. F. GOOD · R. D. GORDON · G. N. HAMMOND · L. K. HARPER · G. HARRISON · M. E. HARSE · P. H. HARTLEY · T. J. THILL · WHILLMAN · A. M. B. HUGHES · R. HUME · M. H. HUTCHINSON · E. C. KAUFFMANN · J. N. KENNEDY · E. G. KENSHEOF · WAKING · J. T. KNOX · G. W. LAWSON · K. W. LAWTON · L. LONGBOTTOM · W. J. LOVELACE · C. M. KAY · L. M. McPHEE · V. R. MATTHEWS · F. G. MILSON · H. R. MORGAN · G. E. MORTIMER · P. E. C. NAPPER · A. T. NEWTON · W. J. PARSONS · I. PAUL · O. J. PEMBERTON · K. PERRY · F. R. PRATT · R. K. PRITCHARD · B. L. PURVIS · R. A. ROBERTSON · P. SCOTT · J. A. SEED · T. SIMS-HILDITCH · F. G. SMITH · D. W. STANTIAL · W. G. STEELE · A. J. SUSSKIND · R. C. ETHICKE · P. L. THORNE · P. M. TODD · J. B. TOMLINSON · E. W. TRANMER · W. E. TROKE · J. B. WALKER · C. J. WALLIS · E. F. WEAR · C. H. WEBB · E. R. WHITE · J. P. WILKINS · E. WILLIAMSON · F. L. B. WILSON · R. H. WISEMAN · C. A. WOOD · W. R. WOODCOCK · H. W. WOODNOTH *Members of the Staff:* W. C. BUSH · R. W. H. ROBERTSON

The photographs on these two pages are of the Royal Institute's War Memorial which was unveiled by the President, Sir Lancelot Keay, K.B.E., on 22 June. The names are carved in panels of San Stefano Roman stone placed on either side of the door leading from the main entrance hall to the foyer. The architect was Mr. G. Grey Wornum [F] and the lettering was carved by Mr. Percy Smith

Members Retiring from the Council

SIR PERCY THOMAS, C. H. JAMES, C. F. MARTIN, PERCY J. BARTLETT, A. C. BUNCH, J. NELSON MEREDITH, PROFESSOR W. G. HOLFORD, R. NORMAN MACKELLAR, NORVAL R. PAXTON, D. B. JENKINSON, S. J. STANTON, A. G. BERRY, H. V. DE COURCY HAGUE, S. E. URWIN, D. J. MCPHERSON BURTON, R. H. GIBSON, GORDON MCL. PITTS, N. L. HANSON, ANTHONY M. CHITTY, P. K. HANTON.

Honorary Members of the Royal Institute

The Earl of Ilchester, O.B.E., F.S.A., and the Rt. Hon. Viscount Samuel, G.C.B., G.B.E., have accepted the Council's nomination to the Honorary Fellowship.

Mr. Sacheverell Sitwell has accepted the Council's nomination to the Honorary Associateship.

University of Princeton Bronze Medal

The Council have received a bronze medal presented to the Royal Institute by the University of Princeton in commemoration of the Bicentenary of the University.

Leverhulme Research Fellowships 1948

Among the Leverhulme Research Fellowships and grants recently announced are two to architects. Mr. I. D. Burke, B.A., A.M.T.P.I. [A], Chief Planning Officer of the East Central (Scotland) Regional Planning Advisory Committee, Dundee, is to study problems of rural depopulation; Mr. R. Llewellyn Davies, B.A. [A], Branch Architect (Research and Development) of British Railways, is to study design of building elements in the light of recent research.

Sir Patrick Abercrombie, President of International Union of Architects

The newly formed International Union of Architects, at its first conference at Lausanne, elected Sir Patrick Abercrombie, M.A. [F] as its President.

Unveiling of the R.I.B.A. War Memorial

The Ceremony began with Prayers read by the Chaplain, Prebendary H. J. Matthews, M.A., Rector and Rural Dean of St. Marylebone. THE PRESIDENT: We have assembled today in this, the home of our Art, for the unveiling and dedication of a memorial to the two hundred and fifteen members, students and staff of this Royal Institute, who gave their lives in the last Great War. Our memorial, designed, as is fitting, by the architect of this building, Grey Wornum, has been executed under the direction of Percy Smith, who has also been responsible for the carving of the names of the Presidents and Gold Medallists of this Institute in the main hall.

As entering the building we see the names of those honoured for their services to our Art, so, too, in future, those using the much frequented hall beyond will see the honoured names of those associated with this Institute, who gave their lives for our protection, and seeing will remember the sacrifice they made and be thankful for the example nobly set by them.

It was the hope of those whom we commemorate today, that they, each in their respective spheres, would contribute to the greater beauty of our land. They had knowledge of an easier conflict, acclaimed by those who lead the nation to be a war to end all war, and having faith in those they had the right to trust, they turned their minds to things of peace, to increasing culture, to building or learning to build with grace and charm and so follow in the best tradition of our land.

When they realized that that trust was misplaced, without bitterness, though trained in practices of peace, they played their part in war, protecting our people and these shores, and counting not the cost made us debtors by the sacrifice they paid. In the discharge of that debt a heavy burden rests upon us. Each must endeavour, so far as he or she is able, to cement the bonds existing between ourselves and those of other races that, through better understanding, peace, not war ensues.

Therefore, it is our duty as members of a proud and age-long race to take such steps as lie within our power to prevent a further

war, with all its unknown horrors, not by appeasing the aggressor, but through a better understanding between the common people of the nations of the world and by our ability through strength, if need be, to maintain our honour and enforce the right.

Thus we shall discharge our debt to those who died for us, and in whose glorious memory I now unveil the stones on which their names are cut—to remain in honour in this hallowed space so long as our building stands.

The President then unveiled the Memorial.

The Ceremony concluded with Prayers read by the Chaplain.

New Schools Exhibition

Photographic copies of the screens of the New Schools exhibition are now being prepared to help meet the demand for the exhibition from provincial and other centres. The complete exhibition, unfortunately, cannot easily be toured, and it will only be shown complete at Glasgow and possibly at Manchester and Newcastle: provisional arrangements are being made for the last two cities, while those for Glasgow are in the hands of the Scottish Section of the Council of Industrial Design.

The first photographic copy will be ready by 1 September, and it is hoped the touring of it will be started on 15 September. Additional copies will be made if the demand is large enough. It is suggested that each centre should show the exhibition for three days, i.e. Tuesday, Wednesday and Thursday each week and that, on the other days, it be dismantled, despatched and hung again at the next centre. Allied Societies will be asked to collaborate in making the necessary arrangements in their areas. As was done with touring exhibitions before the war, a tour has to be arranged to keep distances between centres as short as possible. This reduces cost and time of transport. It is important that the exhibition, which is topical, should circulate quickly.

It was seen at the R.I.B.A. by 7,350 visitors, who were mainly representatives of educational authorities, school teachers and other educationalists. A good proportion of members of the Institute also attended.

Exhibition of Industrial Design

The Royal Academy are to hold an exhibition entitled *Royal Designers for Industry* at Burlington House in October. This is the first exhibition of the work of Royal Designers for Industry (RDI's), and is being organized jointly by the Royal Society of Arts and the Council of Industrial Design. It will appeal as much to the customer as to the manufacturer, and the public will see for the first time the stages in the creation of a new product from the first sketches, through models and prototypes, to the finished article. The distinction RDI was instituted by the Royal Society of Arts in 1936. It may be held at no time by more than 40 designers, and is recognized to be the highest award to be attained in the field of industrial design. The final selection of the work to be shown has not yet been made, but will include the Alanbrooke Sword of Honour by R. Y. Goodden [A], the interior fittings and furniture of the ss. *Orcaades*, the Coronation Scot and the Vickers Viking airliner by Brian O'Rourke [F], and equipment for London Transport by Dr. Charles Holden [F].

The Canteen at the R.I.B.A.

The canteen in the old Members' Room on the second floor of 66 Portland Place has proved a great success. Opened in December last for the R.I.B.A. staff it was made available to members for lunch as soon as the organization was running smoothly. It is now operating at capacity, having proved popular with members in nearby offices as well as with those attending committees in the middle of the day. At teatime it is open to the staff only; members may obtain tea in the Members' Room on the first floor by telephoning from there to the kitchen; the charge is 1s.

The Working Party

Sir Lancelot Keay, K.B.E., is to act as assessor on behalf of the architectural profession on the Working Party on Building Operations, set up by the Minister of Works. The Working Party is under the chairmanship of Sir Thomas W. Phillips, Permanent Secretary, Ministry of National Insurance, and formerly Permanent Secretary, Ministry of Labour and National Service. There are four independent members, four employers' representatives and four operatives' representatives. These include Sir Hugh Beaver, formerly Controller General of the Ministry of Works; Sir George M. Burt, Chairman of the Building Research Board and Managing Director, Messrs. John Mowlem and Co. Ltd.; Mr. H. B. Kerr, Member of Council of the National Federation of Building Trades' Employers; Sir John Stephenson, President of the National Federation of Building Trades' Operatives; and Mr. R. Coppock [Hon. A], General Secretary of the N.F.B.T.O.

The terms of reference of the Working Party are: 'To enquire into (a) the organization and efficiency of building operations in this country, including those of specialist and sub-contracting trades; (b) the position of the professions in relation thereto; (c) the arrangements for financing operations; and (d) the types of contract in general use, and to make recommendations'. Questions of wages and conditions which are dealt with by the joint negotiating machinery in the industries will be outside the scope of the enquiry.

Town Planning Exhibition

A British Council Town Planning Exhibition was on view to an invited audience at the R.I.B.A. on 24 June. It has been assembled by the British Council at the request of the Federal and State Governments of Australia, and has been scheduled for a year's Australian tour, commencing in the autumn. A special Advisory Committee was appointed by the British Council to supervise its preparation and consisted of Mr. S. L. G. Beaufoy [F], Mr. A. M. Chitty [F], Mr. R. T. Kennedy [A], Mr. R. H. Matthew [A], and Sir George Pepler [Hon. A]. A second version of the same exhibition, but with slight differences, is being toured in Germany by the Control Commission and is visiting Munich in July, Hanover in August, Berlin in September, Hamburg and Dusseldorf in October, continuing its German tour until March 1949. The Design Research Unit was responsible for both production and design. The Australian Exhibition, as shown at the R.I.B.A., is divided into four sections. The first deals with the theory of redevelopment of a central area: the second consists of the outline proposals for Middlesborough and Manchester and part of the County of London plan: a model and plans of the proposals for Harlow New Town are used in the third section to illustrate the development of New Towns: the fourth section deals with regional planning using, as examples, the Clyde Valley, Central and Eastern regions of Scotland.

Edinburgh Chair of Architecture

At the annual presentation of diplomas and certificates gained in the Edinburgh College of Art on 2 July it was announced that a Chair of Architecture has been established in Edinburgh, together with an honours degree course. It was also announced that the honours degree course in architecture would be introduced into the syllabus in October this year.

Church Architecture

The Royal Institute provided a large number of photographs for the architectural section of an exhibition on Church Art held at the Central Hall, Westminster, in connection with the recent Church Congress. This section was organized by Mr. Laurence King [F], who also delivered one of the lectures, and consisted mainly of illustrations of contemporary churches.



Conference on Housing Layout in Theory and Practice. Part I

Held at the Royal Institute of British Architects
9 and 10 June 1948. The President in the Chair

Address by The Minister of Health

The Right Hon. Aneurin Bevan, M.P., Minister of Health, said: I have to speak this morning upon a subject which I approach with all the diffidence that is appropriate to a layman in the presence of a large number of more experienced laymen, and particularly of experts. I hope, therefore, that you will extend towards me the indulgence which is appropriate from the sophisticated to the innocent.

In the first place, in speaking about layouts of housing estates we must pay some attention to the nature of the dwellings themselves. I do not want to speak this morning about the number of houses or the actual designs of the houses themselves, but obviously it would be nonsense to try to separate the design of the house and the character of the house and the number of houses from the problems of layout.

Since the war we have been engaged, as you know, in a housing programme of very considerable magnitude and some complexity. Our progress so far, although it has, I think, been substantial, and although I think that it has exceeded the achievements of other countries faced with similar and even with lesser difficulties, is nevertheless still, as you all know, inadequate to meet the needs of the times, and a steady housing programme extended over a number of years is still essential if we are to house our people decently and as quickly as possible.

One of the contributions which we felt called upon to make, in order to deal with the post-war emergency housing problem, was the provision of temporary houses, and we have so far provided about 149,000 of them. They are temporary. We hope that they will not be there indefinitely. I know that at the end of the 1914-18 war a number of houses were described as temporary which are still there, and I hope that the same fate will not overtake the houses which we have put up since this last war under the category of temporary, although, of course, these temporary houses are from the point of view of internal fittings of a very high standard, and the people who live in them are very fond of them; and some are in very salubrious surroundings, on the edge of parks. Indeed, many of them can be described as luxury flats in a pastoral setting, and it may not be easy when the time comes to persuade the tenants that they should move elsewhere.

However, no one can regard the temporary houses as pieces of aesthetic delight. We claim no more for them than that they have met a very urgent need and that they are convenient to use, that they are good pieces of domestic machinery. The women in particular like them because they are easy to manage, and we have done our best to try to maintain the standards of accommodation.

They have this very great additional advantage that they satisfied the need, which was at the time most urgent, for small houses for small families. When the men were demobilized the first need was to provide a home for father, mother and one or two small children, so as to try to minimize their domestic hardship and—more than the hardship—the acrimony which often arises from living with one's mother-in-law.

We have in addition provided 268,999 permanent houses of various kinds, and, of those, 70,000 are for owner occupation or for sale. I wish to call attention to this, hoping that our friends of the Press will note it, having regard to the sustained propaganda that we have from day to day. We have succeeded in permitting private enterprise to build 70,000 houses for private ownership, which in the circumstances is a very remarkable achievement.

I want to say a word or two about this, because it has a direct bearing on our discussion. These permanent houses are divided into different types. The majority of them are three-bedroom houses, as you know; 3.19 per cent of them, or 4,470, have one bedroom; 8.06 per cent, or 11,285, have two bedrooms; 120,280, or 85.86 per cent, have three bedrooms; 3,912, or 2.79 per cent, have four bedrooms; and 136 houses, or 0.1 per cent, have five bedrooms or over.

You will see from those figures that it has been thought necessary to concentrate most of the housing during these three years since the war on three-bedroom houses, the small family type of house, while making some slight inroad into the problem of providing larger houses and smaller houses.

As I said earlier, the type of house that we are building has a direct relationship to the kind of layout that is available to the architect. Of course, the laying out of estates with small houses of this sort pre-

sents some very difficult problems, and the modern domestic architect has had to tackle difficulties with which his predecessors were never faced.

We have always regarded the provision of these houses in this way as merely a temporary post-war expedient, and before very long—I cannot say when, because the House of Commons is entitled to hear it first—we are going to encourage local authorities to build some larger houses and smaller houses, so as to bring about a greater diversification of types on local authority estates.

You will remember that immediately after the war, in order to try to mitigate the consequences of building the same type of house everywhere, I asked local authorities in laying out their estates to leave space for larger houses, so that when the estates are completed we shall get away, I hope, from the monotonous character of some of the local authority estates that were built between the wars. Before very long we shall be able to take advantage of that provision, and so our estates ought to show a very much more attractive appearance.

You know—and I want to be quite frank with you—that there has been a great deal of pressure on the Government in the last year, and particularly in the last few months, to let up on the restriction on the building of houses for private ownership. It is impossible to separate the aesthetic from the political. Some politics have ugly consequences. In between the wars the speculative builder in Great Britain did almost irreparable damage to the beauty of the British countryside; and I was determined—and I hope that in this I have the support of all enlightened opinion—that so far as lay in my power I would not let loose the private speculative builder on the post-war housing problem without any restraints or limitations, because we should have bought long-term ugliness for short-term easement. Indeed, I doubt very much whether we should have had short-term easement. What would have happened would have been that the speculative builder would have started a large number of houses which he would not have been able to complete with the limitation of labour and materials forced on us at the moment, and we should have had a large number of houses at different stages of completion—and a long queue at the Official Receiver's.

If we were to prevent the ravages being committed on our country that we experienced before, it was necessary to exercise strong controls on the activities of some of the speculative builders. I hope that these remarks will not be regarded as strictures on the building industry as a whole, but that they are true with regard to some portions of the building industry you can see if you go to the suburbs of most of our towns and cities. Therefore these controls, which are so irksome, these restrictions, which are girded against both in Parliament and in the Press, have been regarded by the Government as absolutely essential, not only to safeguard the quantitative housing programme but also to make the qualitative nature of the programme as attractive and as decent as possible. When these restrictions on the building of houses for private ownership are eased, I hope that aesthetic as well as commercial considerations will operate.

The local authorities in 1945 and 1946 were restricted in what they could do by virtue of the fact that most of them could only complete the layouts that were there before the war, and there was not very much elbow-room for modern ideas. We did not expect, therefore, that they would be able to achieve miracles of distinguished layout immediately. Some of the local authorities have been exceedingly imaginative and enterprising, but I cannot say that that is true of all of them. Some of them have been monotonously repetitive. They have built houses of almost exactly the same type, only slightly larger, than they built before the war, and many of them have repeated what I consider to be an architectural monstrosity, building semi-detached houses all over the place.

The semi-detached house, when you speak of small cottages, has to be handled with the utmost imagination if it is not to be offensive. We all know that the desire to live in a semi-detached house is a sheer reaction against the long streets of the Industrial Revolution; and a reaction against experience is not a good guide in aesthetic matters. To act and react against what we have suffered is not organic architecture, and it is certainly not functional architecture—though I am not going to start on those controversies, which make some architects purple-faced.

I think it will be common ground, however, that we ought not to be guided in our selection of houses merely by the fact that large numbers of the British middle class, whenever they were able to raise themselves above the standards of their fathers, insisted on living in stucco-fronted villas. The architecture of the late Victorian period was the architecture of a class of persons enjoying an uneasy opulence, and the boastful character of their architecture is an expression of their uneasiness. They were the possessors of newly-acquired wealth, and their domestic architecture is merely saying to the world, 'Look at me. I am better off than I was. I can afford to have things that have no use at all.'

This expression of ostentatious leisure has the same relation to functional require-

ments as the mandarin's long nails have to work. We ought not, therefore, merely to react against the ugliness of the Industrial Revolution; we ought to consider our housing estates from the point of view of the sort of population that is going to live in them, the sort of society that they are going to comprehend, and the kind of lives that the people who inhabit them are going to lead.

It is a different kind of society that we are going to have. You know that the villages and towns that grew up in the years between the wars represented to a certain extent the flight from reality. They represented a desire to leave behind what had been unpleasant, and the country was divided into colonies, large numbers of business men with carefully rolled umbrellas, catching suburban trains, leaving little colonies where there was not a sign of work at all and going to the city, returning at night to their twilight homes. This, as I say, was a flight from reality.

The Minister of Town and Country Planning is more concerned about this than I am, because it is his job to talk about properly balanced communities; but I have to have regard to the fact that if we exercised no restraints at all upon post-war building we should have a repetition of this colonization of the population, which is wholly evil, because it leaves some income groups clustered round factories and mines and workshops, with the higher income groups living as if they had no roots at all anywhere, and nobody had to keep them. The culture of that sort of town is deplorable; it is the culture of the crossword puzzle and of escapist literature, because it is itself an expression of escape.

If, therefore, we are to have communities appropriate to the sort of society in which we are going to live all our communities will have to be much more egalitarian. We cannot have aggregations of ostentatious living in one place and in another place colonies of obvious, self-evident workers. We have to have communities where all the various income groups of the population are mixed; indeed we have to try to recapture the glory of some of the old English villages, where the small cottages of the labourers were cheek by jowl with the butcher's shop, and where the doctor could reside benignly with his patients in the same street.

It is certainly true that some of the reasons for having detached dwellings which were sound towards the end of the 19th century and the beginning of this no longer prevail. First of all it would be impossible, I am glad to say, for rich people to have large numbers of body-servants, so that they will not need large houses. Indeed, they do not need large houses nowadays, because when they wish to entertain there are plenty of restaurants to which they can take their friends, and they do not need to convert their own houses into restaurants. But the fact is that we have reached a society where it will not be possible to have houses that are served by large numbers of servants. Whether we like it or not, that is the fact. I have always been rather sorry

for people with large numbers of servants, because when you do have a large house you can only live in a part of it, and after a certain expansion the servants are serving themselves and not the owner at all. We no longer have any justification, therefore, for these large houses. Even the comparatively well-to-do will be living in houses which are not to any extent sharply distinguished from the houses occupied by people who are less opulent, and, therefore, there will be no social justification for the kind of segregation which occurred in a community where there was a wide gulf between the spending power of different sections of the population.

That is going to be the social background against which the architect has to work when he is doing domestic architecture, and so we can expect that the main task of providing houses for the population will depend very largely upon the local authorities, and that owner-occupation instead of being the rule will become the exception.

There is another reason why it is essential that owner-occupation or private ownership of small dwellings should become the exception. We are living in a society which is technically exceedingly mobile. We are not living in agricultural communities. Our communities have to serve the modern machine, and technical changes in industry quite often make necessary shifts in the population, and make it necessary for people to be more mobile. There is nothing that renders the artisan more immobile than house ownership. I am not now arguing about the merits of house ownership, but merely speaking about it in relation to the kind of society in which we live. People can move from place to place, from one occupation to another, much more easily if they are going from one rented house to another than if they have first to sell the house that they own. I have had experience, especially in the older industrial districts, of cases where workers have had to change their occupation and move, and have had to have a forced sale of their dwelling in order to be able to move at all.

I have said some local authorities have been inspired and some have been imaginative, but others have been uninspired and repetitive. I want to say now something which I am quite sure, Mr. President, will not cause you any annoyance, and that is that local authorities, when they are laying out their estates, ought as far as they possibly can to employ architects in doing it. I know that there are a great many surveyors who are very excellent people, and in fact I know some surveyors who are better than many architects; but they are exceptions, and surveyors have an attitude towards building which is more appropriate, quite often, to a military engineer than to an architect. Further, there are some surveyors who believe that their little idiosyncrasies are architectural inspirations. I know of one surveyor who designs public conveniences like Chinese pagodas.

It is therefore essential, I think, that local authorities, even though it may be

slightly more expensive, should employ architects; because we are going to live in these towns for a long time, and, when we look out of our windows, the houses occupied by our neighbours and the architectural composition in which they are placed are parts of our social furniture. If you look out on ugly things you will become ugly yourself. I have the most profound belief in the spiritual education of physical beauty. I believe that if people live in squalid and ugly surroundings, or even in unimaginative and unbeautiful surroundings, it profoundly affects their spiritual and mental character.

If you go round even some of our prefabricated estates, the temporary houses, you will see that where the people occupying the houses have taken pains to cultivate their gardens and to lay out the plots in front of their houses they have a higher standard of citizenship, a greater sense of social responsibility and a higher sense of spiritual values than if they had neglected their front gardens. This matter of seeing to it that people put aesthetic as well as commercial considerations to the forefront is exceedingly important, and the local authorities ought always to have architects when laying out their estates.

When they are laying out very large estates, as some of the larger authorities are doing, where it is difficult, perhaps, for one architect to do all the work, or where it may be undesirable for him to do the whole of it, it is sometimes good to set aside part of the estate for another architect, who will lay it out in accordance with the general design, so that he will bring to his part of the estate a sense of innovation and imagination which might be lacking if the work were done by one person, keeping in mind all the while, of course, the essential consideration of unity in the overall design.

I want to say just one more practical word about the laying out of estates. I have found quite frequently that some local authorities permit forecourt walls of the most extravagant nature to be constructed. I do not know whether any of you heard a most remarkable broadcast by Lewis Mumford when he was over here. He described three things, which he said were symbolic of the British temperament, the genius of the British race; the wall, the ha-ha and the pollarded tree. He described the ha-ha as symbolic of class exclusiveness, as class petrified into caste, and the wall, of course, as an almost pathological desire for privacy, and the pollarded tree as representing the ruthlessness of the British temperament.

I am not going to concern myself with more than one of these symbols, and that is the wall. I can understand, though I cannot sympathize with, the man who wants to build a large wall round his estate, so that nobody can see what is happening inside. But why have a wall which does not serve the purpose of concealing you at all? Why have a high forecourt wall which is ugly, expensive, and makes the whole street sit on your soul? I have seen some estates which looked much

better before they were completed than they did afterwards. When the forecourt walls have been put in you find that the whole street is heavy—monstrously heavy.

In some parts of the country I agree the position is different. I know from my own experience that in Wales we have no longer to fight the English, as we used to do, but to fight the mountain ponies and the sheep, and so there is some justification in remote places for defending your front garden roses from the depredations of the ferocious sheep; but there is no justification in most of our towns and villages for doing it. I hope, therefore, that we shall not spend our scarce labour and precious materials on forecourt walls which are ugly in themselves and which make the whole street so heavy. Some of the more agreeable features of the layouts in some of the American towns are due to the fact that there is a grass verge right down to the kerb.

I dare say that you must have something to mark off your own piece of property from the council's property, so that the dogs may know where they ought not to go, but it need be no more than an indication; it need not be a foolish, wasteful imitation of the castle wall. You cannot get the castle wall, so why try? I hope, therefore, that local authorities and architects will look at this more narrowly.

We have sent out, as you know, a very valuable report by a sub-committee of the Central Housing Advisory Committee over which Lord Farringdon presided, on the layout of front gardens and back gardens. I should like to say a word about the walls of our council houses. The sanitary inspector enters into a conspiracy here with the surveyor, and the sanitary inspector says: 'You must have no creepers, no climbing roses or anything of that sort; it is bad for the house, it makes it damp.' We can carry that too far. Most modern houses are built with cavity walls, and a few delightful roses or wistaria will not really give rise to tuberculosis. If we had these local authority estates covered with green foliage and flowers, would not it be very much more beautiful and agreeable? And now and again, why not a little colour wash? Because we always have grey skies, there is no reason at all why we should have grey walls as well. There are some kinds of colour wash which would not appear garish, even against the cloudy skies which are habitual.

I hope, therefore, that local authorities will either colour wash their houses or encourage the tenants to colour wash them. Here I am a little of an anarchist. Some people say 'Oh, you must always have the colour designs of the streets agreed before hand.' You get someone coming along who says: 'No, no blues; all greens,' or something of that sort; but colours always match, if there are enough of them. You have only to see a painting by Matthew Smith to see that. It is not altogether the right thing, therefore, to try to put all the tenants into a sort of central design and say: 'Don't do this or that.' Let them alone sometimes. You will be quite surprised at the result.

Further, I hope that the local authorities will pay some attention to the layout of the back gardens, because they can be hopelessly ugly, and a little help is all that is needed. Sometimes an agreement about the sort of hedge or fence that is to be put up will help, and do not prohibit the tenants having outhouses because they will have outhouses, and it is much better to co-operate with them in the kind of outhouses to be put up.

These are some practical considerations which have occurred to me as I have been going about the country.

I announced last year, when I met the R.I.B.A. Council, that we were going to offer prizes for the best layouts. We are hoping to be able to do it at the end of this year. This is a graceful, charming and civilized competition, a competition between local authorities and architects as to who can lay out the most beautiful estates.

We are building in the countryside at the moment, as you know, very many more houses than were ever built before. The proportion of houses being built in rural England is greater than the proportion the rural population bears to the whole. Some of these rural houses are very good; some are not so good. What we want to do is to emulate the best. We are going to be judged in ten or fifteen years' time by what we are doing now. I cannot too often repeat that we are being judged now, all of us, by the number of houses that we are building. But that will not be the test before long; the test before long will be the kind of houses we have built and the kind of architectural composition in which we have put them. Have we wantonly destroyed the trees? Have we made insufficient use of natural features? Have we built houses for which our children will be grateful? Because, you see, the housing problem will then be quantitatively solved, and people will not know the emotional situation in which we are trying to build. The emotional connotation of housing shortages will be dispersed by time, but the houses which we shall have put up will be there as monuments to what we have done.

I hope, therefore, that the local authorities, upon whom rests so great a responsibility, will be alive to their opportunities, and will make for us in the next few years architecturally satisfying housing estates and townships of which not only we in this country can be proud but which we can show to our neighbours across the Channel and that we can justify to visitors from all parts of the earth. It is a very great opportunity, and I hope that we shall all rise to it.

The President, in the name of the Conference, thanked the Minister for his interesting and amusing address. Mr. Forshaw's paper, which was to follow, would, he said, be open to discussion. Addresses by Ministers were not open to discussion, or the Minister might see some 'purple-faced architects' looming up! He asked the Conference to show its appreciation of the action of the Minister in being present and giving such an excellent address.

Application of Principles in Layout

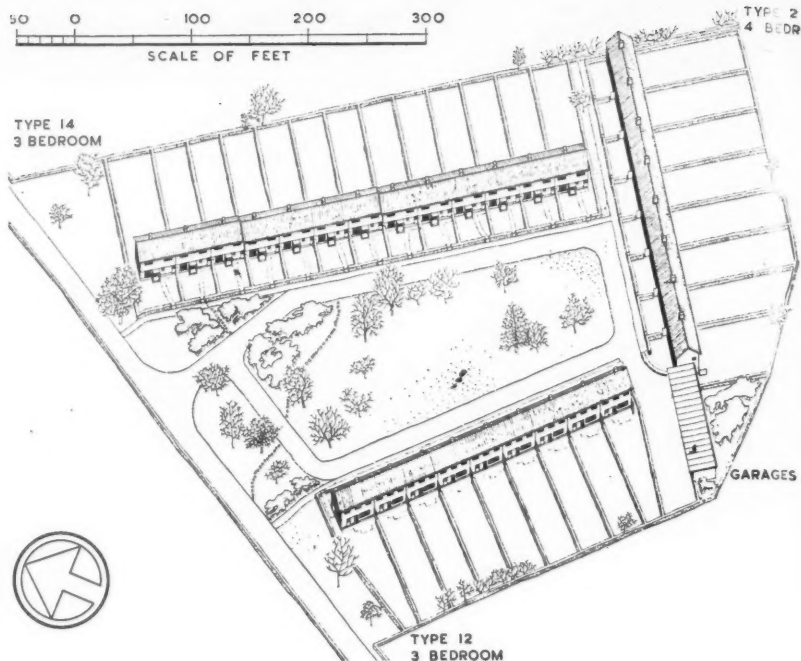
By J. H. Forshaw,
M.C., M.A., B.Arch.(Lvpl.),
M.T.P.I. [F] Chief Architect
and Housing Consultant,
Ministry of Health

The President in the Chair

Mr. Forshaw said that he thought his most useful contribution would be to give an up-to-date summary of what the Ministry of Health recommended to local authorities on the layout and siting of municipal housing. But first he wished to say something about the work of the architects at the Ministry of Health. They had two main functions in regard to housing: the first being to give advice gained from the experience of all parts of the country, from abroad, and from the many other sources open to the Government. That advice was required by both the Minister for the formulation of the Government's housing policy and by local authorities. The second function was to examine local authorities' schemes to assist in implementing the policy laid down by the Government. It should be noted that the second function was not the main task of the Ministry's architects, they were not solely critics.

To fulfil the first task, which was in some sense creative, much of their time was spent in keeping themselves acquainted with the day-to-day progress of schemes and meeting the many individuals and bodies who were contributing to the evolution of housing methods. Some of this work was handled for them by the Building Research Station, while there was close liaison with departmental committees and other Ministries. There were also several independent bodies, such as the Royal Fine Arts Commission, the C.P.R.E., the schools of architecture, the Town Planning Institute, the Institute of Landscape Architects and, most important, the Royal Institute itself. Though the publications of these organizations were available, it was important that they be studied even more widely than they are at present. There was no substitute for that, but the value of a central official department lay in that, it alone, was in a position to integrate specialized knowledge as the basis of the national policy determined by Parliament. The advice to local authorities followed from it—the staff of the Ministry being responsible for keeping local authorities informed.

There were certain fundamental aims or essential principles which all housing



Rural housing scheme at Ditchingham, Norfolk, for Loddon R.D.C. Tayler and Green [FF]. Above: the layout plan. Below: part of an unfinished terrace with colour-washed brickwork; site work and planting not yet completed. An example of the rural 'house-group'; three and four bedroom terrace houses round a central green

authorities should bear in mind. The first was concerned with standards of accommodation, convenience, service and beauty in the separate dwellings. Another was speed in construction. A third, economy in material. But it was with the requirements affecting the scenic value of individual schemes that the Conference was chiefly concerned, namely (1) the siting in small groups of dwellings related architecturally within each residential unit; (2) landscape design seeking harmony in relation of building to building and of building to land; (3) the siting of and extent of access roads, footpaths and gardens.

The planning of the estate layout was just as important as the design of the houses themselves. At first sight the housing problem might appear to involve only the provision of shelter and services, but it should involve all the other considerations

however small or large a scheme might be. Dwellings wrongly laid out could fail to become good homes just as if the drainage were at fault. This was their greatest disappointment at the present time in nearly every part of the country. Housing Committees could not be reminded too often that they were *trustees of environment* and their job was to provide good homes in pleasant places. The new houses, whether normally constructed or prefabricated, were going to be the homes in which this generation's children would spend their formative years. Moreover, there were no grounds for saying that it was not economically sound. The cost of the necessary supplementary work, including skilled architectural advice, was small indeed compared with the permanent influence for good that beauty and seamliness would exert on both body and mind.



Agricultural cottages at Thurlton, Norfolk, for Loddon R.D.C. Tayler and Green [FF]. Note the pairs are linked together by outhouses. Colour-washed in pairs of pink and pairs of white, with bright colours to windows and doors

The terms 'neighbourhood unit' and 'residential unit' had come to be accepted, but it was necessary to distinguish between them. The neighbourhood unit in urban or suburban areas was roughly equivalent to the small town, and was the unit into which the large urban growth should be divided. Its population might vary from five to ten thousand. But this was too large for housing purposes and was therefore subdivided into residential units of from four hundred to fifteen hundred inhabitants. This also was too large an area to be covered with building masses of uniform height and spacing. The residential unit was the basic unit in that all building and all landscape treatment within it should be co-ordinated by the architect in one design. For the purpose of the detailed design it would have to be treated as a number of separate entities or 'house-groups'.

Mr. Forshaw continued: The building of dwellings in communities conforming to the natural landscape has only recently been recognized again as a vital principle in layout. Housing estates have either been treated as a single conglomeration of identical rows or as a single conglomeration of semi-detached villas, that is to say, nearly always in a form which in a broad analysis consists of a comparatively large whole made up of a great many small parts. The parts might be all the same or all different, but in neither case could the scene be said to have unity or variety because the whole was too large to be perceived; and each part of it too small and too cramped to be considered in separation. One must realize that those two terms 'variety' and 'unity' are complementary, not opposite; to dispense with variety is not to gain unity. Without unity you cannot perceive variety. Thus to the designer, a housing estate may appear to have both qualities, but to one of a thousand householders on the same estate the view from his bedroom window may be quite dismal. Viewed in this way it becomes clear that to plan a successful and popular housing area

the architect must project himself in turn into the minds of all the individuals who are going to live in that estate and design 'house-groups', each of distinguished character, yet each in sympathy with the other, that will give a pleasant sense of variety and a comfortable sense of unity to all of them. I have not forgotten that the semi-detached house, as opposed to the terrace, is still undeservedly popular since public opinion is always slow to understand the virtues of what is unfamiliar. It is a fact, however, upon which most architects now agree, that semi-detached dwellings are the least suitable for urban housing and are undesirable also in rural areas where appreciable numbers are involved. We must never shirk our duty to act in the best interests of both present and future generations, even if it entails a certain measure of popular misgiving or opposition at the time. People quite often object to a new house because it is just different from what they are used to, but if trouble is taken to explain the advantages that it offers, peace and an educational victory are seldom far behind. But it may be said, perhaps, that it does need a well-trained housing manager to make the convincing overtures, and I agree that in this field there is a great need for enthusiastic personnel.

Let us now take an imaginary residential unit in a suburban area and see how the architect will plan it, by treating it not as a single mass of housing but as several natural groups modelled into the landscape. In the first place the dwellings in the residential unit will not all be of one kind. Perhaps it will be decided that whatever flats and maisonnettes are needed should be built on a number of specially-selected sites within the neighbourhood unit, overlooking parkways or playing fields or other open space, for these generally are more appropriate for tall blocks. But each residential unit should certainly have a number of ground floor dwellings for old people besides family houses varying in size from two to five bedrooms.

Before this range can be determined for any particular area, a careful survey must be made from which housing committees can discern how many houses of each particular type are required. This is a very much more important problem than is generally appreciated. Most of the houses that are now being built are three bedroomed houses, but economy in accommodation might be made if two bedroomed houses are provided for the many families who at present have an extra bedroom, not because they want a spare room, but simply because smaller houses are not available.

It must be remembered that some sites will be allocated for houses to suit the requirements of the higher income groups. Subsidized and non-subsidized housing should stand side by side; it is a mistake to imagine that people from different vocations in life cannot enjoy living close to each other. In an age when transport is so comparatively rapid we need not worry so much to see that people with the same interests know each other, but it is still our duty to do everything we can to cement a bond of community between those whose lives do not normally bring them together. In the revival in England of this way of living we have a great deal to learn from the French, who never lost the art.

Let me make it plain that a 'house-group' is not a stereotyped unit that can be mathematically defined. It consists of a number of dwellings, but whether five or fifty depends entirely on the character of the design and the nature of the site. There is doubtless a good deal of misapprehension among the public when planners talk of 'neighbourhood units', 'residential units', and now I have added 'house-groups'! What are these new things that they think we ought to live in? But, of course, they are not new at all. The neighbourhood unit is merely the continuing community in which people now live and have lived throughout history; the village surrounding the church, the green,



Left: Ditton Marsh, Warminster and Westbury R.D.C. G. Blair Imrie [F]. The 'house-group' with sense of enclosure secured by use of link walls; interesting detail and colour. Top right: Beaumaris, S. Colwyn Foulkes [4]. Terraced cottages in traditional building climbing a steep slope overlooking the Strait. The cottages will be colour-washed white and the frontage left open to a grass forecourt. Bottom right: Roehampton. A scheme of 25 years ago in the tradition of Unwin's work at Hampstead. Simple guard fences to grass courts, matured trees and creepers

the shops and the inn—not only the existing rural villages, but also those that have been engulfed in urban growth and are now greatly expanded. The residential unit is a small district of people's homes within the village as it now exists as an urban community. The history of the 'house-group' is equally long. The 'square' was the centre of the mediaeval town. The monasteries and almshouses of the 14th century and the colleges of the 15th and 16th centuries gave us the court, the quadrangle and the close, while from the 18th century date the crescent and the terrace.

The 'house-group' is an architectural-cum-social form. It may consist of detached houses, a row of cottages or a block of flats; or it may comprise the houses around a small green. Its social aspect not always inspired by good architecture, yet uprising nevertheless is epitomized in the affection which people will bear towards their own 'street'; a loyalty to their neighbours which is the result of a common experience of life, as lived in the same group of dwellings. The form it takes depends on circumstances, but its ideals are a dominant architectural character holding it together, and an architectural sympathy reconciling it with the neighbouring buildings. It is the architectural expression of the social idea; men living together peaceably in their habitations. It must neither be too big nor too small, but able to hold the attention against the competition of surrounding features. It must therefore be clearly defined with a beginning and an end, yet without breaking down the amenity of the area with harsh unnatural lines.

The form the 'house-groups' will take in the suburban residential unit will depend for one thing on the density of population per acre, and, considered in conjunction with that, upon the amount of open space which is readily accessible to the inhabitants, but outside the site itself; for the more there is outside, the less up to a point need be provided within. However, we can assume for this purpose that, as in nearly all cases, there is nothing like enough outside to admit of anything less than the maximum that can be reserved inside. The latter also will be little enough. This fact really should be recognized and is the chief reason why suburban house-groups must above all be compact. We have already seen that if any sense of balance is to be found in the well-populated areas they should not consist solely of detached or semi-detached dwellings. The architect is led, therefore, to examine the possibilities of the terrace house—a form of house building which late in the last century fell into disrepute. Its condemnation was certainly not without justification, but latterly we have begun to realize that this was the form of some of the best, as well as of most of the worst, domestic architecture that this country has known.

A little thought will show that in view of modern construction, services and equipment, nearly every objection to the terrace house has been invalidated. The last, the undue transmission of noise and vibration through party walls, is now very slight and will doubtless be completely overcome in the near future. Moreover, the construction of a terrace is quicker than that of a corresponding number of semi-detached or de-

tached dwellings and similar savings in cost, materials and space are possible. But its peculiar quality is that in its intimate urban character it expresses the spirit of community and is in itself, a 'house-group'. Such are the arguments which may lead a thoughtful housing committee to adopt the idea of terrace housing for the majority of its dwellings. They will not, of course, be like the long identical terraces on either side of the traffic-way, which characterized bye-law housing of the Victorian period. Every opportunity will be taken to add interest to the scene—by grouping in 'open squares', by stepping back the frontage on one side or the other, by building terraces at right angles to the road instead of facing it, by taking advantage of variation in level, and by setting them in open park-like surroundings. Terrace housing is recommended not only in two but also in three storeys. The combination of the two methods in suburban areas, and of three-storey terraces with tall blocks of maisonettes or flats in higher densities, can do much to achieve the variety of layout that we need. I should like to say more concerning the use of terrace houses and maisonettes, but time is short.*

I have said that the architect must aim to get individual character into his house-groups. If he is wise he will avoid a great variety of elevational design, but seek it by more subtle means. The use of bright colour washes, boldly applied on wall surfaces, or to accentuate particular features such as window openings and reveals together with simple variations of motif in

*See *Housing and Town Development*, R.I.B.A. JOURNAL, May 1948.



An example of the 'house-group' for higher density residential areas. A layout comprising blocks of flats and terrace houses. Housing redevelopment at Shacklewell Road, for the Hackney Borough Council. Frederick Gibberd [F], in collaboration with G. L. Downing, Borough Engineer and Surveyor

door-heads and porches, can be effective if done well. But the most compelling, satisfying and altogether the surest way to retain interest is by variations in the relation between landscape and building masses. It is here that we reach the core of our subject, for the ground-work of design in landscape and building mass is the plan or layout. The quality of the architect's work will depend on his ingenuity in discovering alternative plan arrangements for buildings, gardens and roads, and so creating a new horizon for every 'house-group'.

The most noticeable and often the only landscape feature in existing housing estates is the broad, ugly network of roads. These must not be repeated, since it is quite unnecessary—a waste of money, manpower and above all good land. Trafficways must if possible be completely excluded from the residential unit, and access roads reduced to a minimum. Footpaths instead should abound, and rather than follow the roads should lead by the shortest route to school, bus stop, railway station and the shops. The highway was once a common *rendezvous*, today fast motor traffic has made it part of a machine with a single purpose. It has become so dangerous that it must be bounded in and segregated in the same way as the railway, and therefore house builders must now turn their backs on it. It is, of course, an essential track of communication, but it should not be allowed to dominate or disturb the atmosphere of the residential scene.

Local authorities are now well aware of the importance of preserving mature forest

trees and hedgerows, and of the necessity, though perhaps less surely, to be constantly planting new ones. Much has also been said lately about the 'Reilly Green'; doubtless this and other matters will be treated later in this conference, so I will pass on to the problem of the private garden.

Here Mr. Forshaw referred to the Faringdon Report on 'The Appearance of Housing Estates'. Though it was a modest affair, he claimed that its recommendations were eminently sensible. Why was this report necessary? The answer was written across the face of all those dreary localities in which so many of the English people had their homes. This was the first time that the State had made a comprehensive effort to improve the visual quality and amenity of housing. If local authorities could implement in spirit and letter the recommendations of the Faringdon Report, we should spread abroad the idea which had hitherto been confined to a few solitary but distinguished endeavours such as the Bournville Village Trust, Welwyn Garden City and Roehampton. Its recommendations mainly covered suburban areas, but the same principles applied to those of higher density. Also the Committee was thinking mainly in terms of existing estates and therefore questions of planning and site layout had not been discussed; this should not mislead one into thinking that these did not affect radically the faults for which the report was seeking a remedy.

Mr. Forshaw continued: There are two points concerning new estates which should

be investigated. First, it is a mistake to provide every house with the same sized garden; on the average the gardens provided on some estates have been too large. It is clear that many tenants do not want large gardens, they only find them a nuisance to maintain and quite naturally let them fall into neglect. Many tenants, I believe, only want what amounts to an open-air room at the back and a small lawn and flower-bed at the front; others will require more. But an important point that has been made in the Report, and one which I commend to your notice, is that the outdoor room and small back garden must be private, and therefore the cultivation of hedges and trees to screen it is very desirable.

The second matter is that of allotments; and this is another reason why gardens should be smaller. If separate allotment areas are reserved, tenants can lease the land they require for vegetable growing, where facilities for providing expert advice, the common use of fertilizers, equipment and so forth can be centralized. The arrangement might not altogether satisfy the enthusiastic gardener, but it will probably meet the need of the many less able and more modest. In any case I feel that the need for allotments in addition to gardens must always be considered; now especially, when our world position is so changed, there is little doubt that much more food will have to be grown at home.

Not only should the space saved by smaller private gardens be reserved for allotments; much of it should go to provide the larger community gardens and play-



A Swiss example, near Zurich; showing terrace housing in an open garden setting, with narrow yet adequate access roads and foot-paths. An infant's play-pit in the foreground

grounds, which the Report so rightly recommends in paragraph 38. Indeed, I would say that if the policy of smaller individual gardens is adopted it must be accompanied by the provision of communal gardens or greens on the rough basis of one for every house-group. Doubtless the difficulties of maintaining them may discourage housing committees, but if tackled with determination the idea ought to be made to work economically. Before leaving this subject I would draw your attention to a book recently published on 'Land and Landscape'.* On page 209 is a suggestion of what the open-air room and small back garden might be.

The issue, however, which underlies all that the Faringdon Committee recommends is the fact that we must now recognize the necessity for every housing authority to undertake not merely to build a house, but to lay out at least the foundations of a garden. If tenants are expected to maintain a garden 'the importance of a good start cannot be over-emphasized'; therefore the authority should provide for certain site work of the same standard as the buildings themselves. The important features are paved paths, terraces, garden sheds, walls and fences of good design and of the best available materials; lastly, hedges and some trees, preferably planted before the tenants move in. With these, at least there is a solid, uniform and reasonably generous foundation upon which even the most ineffective of gardeners can work with some chance of success; then at least the private erection of fences and sheds with, any and every, rough and ugly material becomes unnecessary, and the bleak draughty atmosphere of the backyard is displaced.

What I have been able to say within the limits of this paper has, I am afraid, been hardly enough to do justice to the subject, but I hope that I have at least made clear the theme, on which we must work together. For do not forget that central and

* 'Land and Landscape' by Brenda Colvin, John Murray, 1948.

local government are truly to be considered as partners, and therefore it is as partners that the Ministry of Health and Housing Committees must co-operate. The theme itself can be summarized as 'The house-group plus Faringdon'. A significant point that you will notice in the Report is the number of times that the Committee refers to the need for 'varying the appearance of numbers of similar houses.' It was not part of their job to go on to discuss the more radical means by which that monotony can be overcome in new schemes, but it can most effectively be done by planning the layout from the first with the new conception in mind of what *should be* the architectural unit in housing.

In conclusion, let me try to sum up the issue which is at stake in this problem of housing layout and its challenge that history has thrown down to us. The responsibility that has been entrusted to housing authorities is even greater than it was before 1939. This generation, I believe, placed as it is at the end of one era in history and at the beginning of another, is in a position to act with greater prescience than its immediate predecessors. Therefore we shall be the more culpable if through mere obstinacy we build housing estates in 1948 according to the old ideas, in which we know that the faults committed in 1928 are perpetuated, and knowing at the same time that we still have to amend the faults of 1848.

DISCUSSION

Councillor V. N. Young (Gateshead) expressed the hope that the Conference would lead to some action and to an improvement in housing layout. He thought that some post-war layouts were worse than some of those done between the wars, and wondered who was responsible. Housing Committees might look at the plans, but as a rule it was not until the houses were actually erected that they could arrive at a judgement. Did architects place before their committees the views which had been expressed at the Conference?

In Gateshead they had no temporary houses, and they had tried to carry out layouts which would stand the test of 50 years, but they had been criticized on account of the slowness of building. For that the Minister must accept some measure of responsibility, because he gave great publicity to the authorities who built the most houses in the shortest space of time. It was to be hoped that in future greater publicity would be given to the authorities who had the best layouts.

He hoped that there would not be too much concentration on the smaller houses; the time would come when it would be advisable to let people have a somewhat larger house than they might actually need.

It was not everyone who wished for minimum accommodation; some people liked to have a spare room.

Mr. Joseph Emberton [F] pointed out that the creation of open spaces amongst the houses and house-groups would require a good deal of land, and expressed the hope that that would not result in spreading housing schemes over too great areas of the country. If communal spaces were to be provided, he said, the space should be saved by providing somewhat higher buildings; and he believed that a considerable percentage of the people of this country would prefer to live in higher buildings. Nowadays many women desired to go out to work, and if they were to do that a flat was obviously more convenient.

The Minister had complained about walls in front of houses, but one must be careful not to look on the layout of streets as designed purely to beautify the town or village in which they were placed instead of places in which people were to live, and if all the outside space of their houses was exposed to the public gaze it would not serve the purpose for which people wanted it.

Councillor Moulder (Gloucester) said that his authority had tried to carry out the idea of an unfenced grass space in front of the houses, but they had found that the postman, the baker, and the milkman started at one end of the road and walked the whole way along on the grass. How to get over that he did not know; it might be a matter of education. He thought that the Minister's ambitions would be achieved only when the occupants of the houses had been educated to appreciate the amenities provided for them.

He happened to live in an old terrace house, built about 250 years ago, and his problem was that everything had to come through the front door. When the coalman came with his sacks the perambulator had to be moved to allow him to get by, and the way he handled his sacks involved a great deal of work afterwards in cleaning up the house. He hoped that those conditions would not be perpetuated, and that houses would be designed at which the tradesmen could call without upsetting the domestic bliss.

Mr. J. H. Forshaw, in reply, said that Mr. Moulder's trouble was that his house was wrongly planned; it was possible today to plan terrace houses which would do all that Mr. Moulder wanted.

He agreed with Mr. Young, and hoped he would be courageous and would continue to emphasize the importance of good layout. The Minister himself had made the point that in a few years the public would have forgotten the present need for houses, and would judge what had been done on the basis of quality rather than quantity.



Modern Requirements of Residential Development

By S. L. G. Beaufoy, C.B.E., M.T.P.I. [F], Director of Technical Services, Ministry of Town and Country Planning

The President in the Chair

Past and Present Ideas in Residential Development. Mr. Beaufoy said that while housing still constituted one of the nation's greatest problems, he thought the public at large did not recognize or perhaps know what enormous progress had been made in the face of great difficulties. Since the war some 500,000 families had been housed, and it now seemed certain that 750,000 would be housed by the end of the year. Britain was leading the world in housing, the standards of accommodation being higher than had been provided by most, if not all other countries in their post-war housing. On the other hand, the appearance of many houses, prefabricated and traditional, was not all that could be wished, and layouts were often very poor. But having regard to the many difficulties, it would be ungenerous to criticize results too harshly.

Much of what he would have to say was not new but needed repeating. It was almost 40 years since Raymond Unwin had published *Town Planning in Practice*, and 30 years since the publication of the Tudor Walters Report. Unwin enunciated principles and the Tudor Walters Report confirmed them. Only in some ways had these principles been applied. Certainly dense development had given way to an open layout. But while the advances which had been made had benefited the health of the people, this had often been achieved at unnecessarily high costs in other directions. He asked whether we had not swung from one extreme to the other, and that in future we might have to achieve better results more economically. We had certainly been prodigal with our land: vast areas of first-class quality land had been lost to agriculture and converted into a dreary waste of bricks and mortar: there was little evidence that we had yet understood and practised the art of town building.

The object of all housing layout was to satisfy basic human needs in the best way. Ideas changed as time passed, but the need for life, warmth, interest, security and happiness did not change and we would have to learn to provide for their development. The planner had the responsibility of preparing the proper setting for the development of a spirit of co-operation and goodwill among the inhabitants.

Neighbourhood Planning. The concept of neighbourhood planning was summed up in a modern-sounding quotation from the Tudor Walters Report: 'It is not enough merely to cover the ground with streets and houses. The site should be considered as the future location of a community mostly

engaged in industrial pursuits having many needs in addition to that of house room. Their social, educational, recreational, and other requirements should therefore be considered, and when not already adequately provided for on the surrounding areas should be met as part of the layout of the scheme.'

So far, due in part perhaps to the lack of adequate powers, but rather more to piecemeal planning and development, that advice had not been comprehensively followed. The communal facilities had often been inadequate or provided as afterthoughts; but we were learning from our mistakes.

Size of Towns. What was the optimum size of a town? The advantages of a large city were often overlooked, but in the small town there was more family spirit, and it could be conceived as a single, if complex, organism. It was easier for people to get to know one another and, broadly speaking, a higher proportion of the population took an interest in local affairs. The larger the town the more that spirit was likely to be lost, though this was a somewhat dangerous generalization. Today we could plan or redevelop our towns to form units of a size which allowed an intermingling of interests and pride of place. Research showed that no general answer as to size was possible. The limits of a town were reached when public services and journeys became uneconomical to the body corporate or the individual. Equally there was a lower limit below which revenue, even though assisted by Government loans or grants, would not provide adequate services, leaving the community dependent on other towns for certain needs. It was difficult to assess these upper and lower limits, but investigation suggested that advantages lay with towns ranging from 50,000 and 200,000 people. In planning new towns a population between 30,000 and 100,000 was indicated, according to the region, though studies in connection with the Greater London Plan showed a range between 50,000 and 80,000 as being appropriate. On the one hand social and educational services, the need for a mixed population, and adequately diverse industrial development suggested 50,000: on the other hand a lack of sufficient sites to cater for the necessary decongestion of central London suggested a figure nearer 80,000.

Size of Neighbourhoods. Mr. Beaufoy continued: It is considerably easier to determine the optimum size of a neighbourhood. At this stage it is bound to be empirical,

but one can argue on the subject for ever and the present necessity is to do something on the best data available. It is generally agreed that a minimum population of 5,000 and a maximum of 10,000 forms the desirable content of a neighbourhood unit. This has been arrived at in a number of ways. A population of 10,000 whilst normally embracing a variety of experiences and tastes is yet small enough to enable people to get to know each other well, to widen the sphere of their activities and to meet those with interests kindred to their own. A population of 10,000 can easily be housed at a reasonable density giving a liberal allowance for gardens and open spaces, within ten minutes' walk from the neighbourhood centre. It is sufficiently large to warrant the provision of enough communal facilities to give liveliness to the area, in addition to the amenities and amusements of the main centre of the town.

School requirements also tend to determine neighbourhood sizes. On a national average a population of 5,000 will support in addition to nursery schools, one school for children of 5 to 7 years and one for those of 8 to 11 years. A population of 10,000 will thus support two of each and also something over two normal sized secondary schools. Everything points therefore to the reasonableness of a neighbourhood population of around 10,000. The nursery and junior schools should be inside the main traffic roads bounding the neighbourhood; the secondary schools can be outside the neighbourhood.

Taking the Dudley Report as a basis, the approximate area required for a neighbourhood of 10,000 people will be 480 acres for an outer neighbourhood at a gross density of 21 people per acre, 330 acres for a 'rounding-off' neighbourhood (i.e. infilling in areas partly built-up, or finishing off housing estates on fairly open land) at a gross density of 30, and 250 acres for inner neighbourhoods at a gross density of 40.

Number of Neighbourhoods. The number of neighbourhoods for which a town will need to plan can only be determined after a careful survey, the necessity for which is now recognized by the provisions of the Town and Country Planning Act, 1947.

In assessing the amount of land required for development, account will have to be taken both of decongestion and possible immigration. In the larger towns present housing needs arising from slum clearance and overcrowding (accentuated in some cases by war damage) may alone be

sufficient to warrant the development of an entirely new neighbourhood, apart altogether from growth by new population, which may arise from industrial expansion or decentralization from other towns and may affect towns both large and small. Where immigration is unlikely it may be possible in small towns to meet the housing need by infilling or some small expansion of the existing built-up area, but even here full account should be taken of the requirements of neighbourhood planning.

The preparation of a preliminary plan following the survey will show the broad intentions and requirements for the development and expansion of the town. It will indicate the principal traffic routes, railways, open spaces and the location and size of the central business area, the industrial areas and the residential neighbourhoods. The number of neighbourhoods required will, to some extent, be influenced by topography and the location of the physical features to which I have just referred.

Later a more detailed plan will have to be prepared showing just what is proposed in a particular neighbourhood area. You will already know from the Report on the Design of Dwellings (the Dudley Report) in the preparation of which the Ministry of Town and Country Planning was concerned, something of the Ministry's views on neighbourhood planning, and it is our intention shortly to publish a Residential Neighbourhoods Handbook which will discuss the subject in greater detail.

Residential Density. Now I should like to turn for a few minutes to the difficult question of residential densities, since this as much as anything helps to determine the appearance and size of neighbourhoods. As I have already said, the reaction from high density development has resulted in considerable evils of another kind. Nobody would suggest a return to anything approaching the kind of development which followed the industrial revolution, but it is equally clear that the dead level of eight or twelve houses to the acre has not produced the combination of good living conditions and good town building which we all want to see.

We have still much to learn about what constitutes "good living conditions", but a great deal of thought has been given to density standards appropriate to urban, suburban and rural areas, and as a result of collaboration between my Ministry and the Ministry of Health, certain figures were proposed for each type of area in the Dudley Report to which I have already referred. As many of you will remember, our President was a distinguished Member of the Committee which produced that Report.

The object of density control being to provide adequate living space for people it is no longer considered sufficient to calculate density in terms of houses per acre. Density calculations should in the first instance be based on the density of population which, when considered together with the communal facilities this

population will require, will produce a well-planned town. This method of calculating density, which was, I think, first used on a notable scale in the preparation of the County of London and Greater London Plans, will be generally used in the preparation of Development Plans under the new Town and Country Planning Act. The application of this principle when translated back into terms of bricks and mortar will result in a much greater flexibility in layout and afford ample opportunities for architectural grouping.

In any discussion of density it is essential to start with a clear definition of terms and for the purposes of this paper, it will be enough to distinguish between net density, and gross density in its relation to the neighbourhood unit. Net density means the average number of persons per acre of housing area (which will include internal access roads and certain minor open spaces). Gross density is the average number of persons per acre over the whole neighbourhood and includes the areas set aside for schools, shops, open spaces and other communal facilities.

The Dudley Report proposes a range of net densities varying from 30 persons per acre in the outer neighbourhoods to a general maximum of 100 in the inner areas, though it is suggested that in certain large cities 120 is permissible in the central area. There may need to be slight variations on this figure, as, for instance, in Central London where, owing to the pressure for housing and the shortage of adequate sites the development of which does not first involve demolition, a figure of 136 has been agreed by my Minister for use during the early post-war years. This figure is subject thereafter to review, with the object of getting the average over neighbourhood units down to 120 or if possible 100. Maximum net density is conditioned by the proportion of houses and flats appropriate to the locality, the maximum desirable and permissible height of flats and the daylighting requirements of the buildings to be built on the site and those surrounding it. These are factors which vary widely in different areas and can only be decided by detailed local study.

But it will be at once apparent to you that net density considered alone is of little value to neighbourhood planning. So much hangs on the other requirements of human beings. It is perfectly feasible to provide adequate living accommodation for 200 or even more persons on any one acre, but to cover large acreages with dwellings at such high densities, or, indeed, at all, without regard to the adequate provision of communal facilities such as shops, service industries, and particularly open spaces and schools is not good residential planning. All these factors must be taken into account, and whilst the ever-increasing demands for social facilities must be kept within practical and economic bounds, these facilities are none the less essential and their provision must operate to reduce the present high gross densities in the inner areas of our towns.

If we are to correct the mistakes of the

past we must face the position that non-housing uses and to a considerable extent non-building uses will take up more space both in central and outer areas. The allocation of this space calls for a high standard of design if town building in its best sense is to be achieved, and its distribution will also affect the fixing and distribution of net densities.

Distribution of Densities. The planner should prepare a density zone map in the early stages of the preparation of his neighbourhood maps. Naturally the density will vary according to the type of population to be catered for, but in the absence of any particular circumstances affecting the locality the aim will be to get a representative cross-section of the population of the town in each neighbourhood.

How are the various density ranges and types of dwellings to be distributed? In the past density has been in pyramid form—high in the centre, decreasing towards the outskirts. To some extent this is in the natural order and will continue, though with gradual decreases to proper proportions as redevelopment proceeds. Since the value of land is high where the demand is greatest, it is near the town centre that we shall find the highest densities and larger proportion of flats.

But attention needs to be given to a greater equalization of density with the neighbourhood as the basic unit. Except for quite small towns it is not usual to find industry confined to one area or to the central area, and in order to minimize the need for daily journeys it is proper to locate as many people near their work as is compatible with the creation and maintenance of proper living conditions. Apart from this point of view of economy in time and money, there are other advantages in having an area of higher density in the outer neighbourhoods as well as in the centre of the town.

To start with, it affords greater opportunities for interesting architectural composition, or civic design. Not everybody who, by necessity or preference, lives in the suburbs wants a garden, as the appearance of many of these will testify. There are many single people, elderly couples, young couples with no children, and even people with families, who would prefer a flat if any were available, and a few blocks of flats, some of which would be most suitably located near the neighbourhood centre, would do a great deal to provide appropriate scale and an urban appearance to the area. It will be found, too, that a slight increase in gross density per acre in the outer areas will have a very considerable effect on the total number of people who can be properly accommodated there, and in the larger towns will cause a measurable reduction in the overspill population for whom accommodation will have to be found in new or expanded towns elsewhere.

The subject of residential density is one of considerable complexity, and also, of course, goes to the root of all urban planning. I hope it will be possible when the pressure of existing commitments is



Eltham 1920. Treatment at a road junction



Eltham. Interest at every turn



Eltham. Variety and interest in urban grouping



Eltham. Good use of levels in grouping

somewhat eased for the Ministry to issue some notes on the subject for the assistance of planning authorities and others who are concerned with it.

Provision for Various Types of Dwelling.

To be successful a neighbourhood unit must contain a good mixture of all age groups. Only then can stability in population be achieved, and this is perhaps of greater importance than any other single factor in town development. In planning a neighbourhood and in guiding its development it is necessary, therefore, to maintain a proper balance in the provision of dwellings for all age groups.

The family with young children is the unit of the greatest importance. The Registrar General provides figures showing the national proportion of children to adults in various age groups, but these figures should always be supplemented by local studies. It seems certain that in future we shall require a higher proportion of dwellings for small families. Longevity is increasing, and there is every indication that it will continue to do so. More

dwellings suited to the needs of old people will be wanted.

Again the family unit is smaller. There is now no escape from at least a temporary decrease in the total population, and although there has been an increase in the birth-rate common to every post-war period I regard with considerable scepticism all optimistic prophecies of a permanent improvement, if improvement it be. At the same time it is not possible yet to judge the effect of the many forms of State encouragement and help by way of pre-natal and other medical care, milk, schooling, school meals, children's allowances, and so on. It may be that this will help, and we can but wait and see.

Flats versus Houses. On this occasion, I intend to avoid getting caught up in the old question of flats versus houses, their comparative merits and the proportions in which they should be provided. Needs and preference vary widely in different areas, and local survey is necessary to determine the proportion appropriate to each case. Sometimes this has been ascertained by making

sample enquiries, and I would just like to give a word of warning regarding the issue of questionnaires which are intended to discover local preferences. Very great care is necessary in framing the questions to be put. Merely to ask: 'Would you prefer to live in a flat or in a house' will produce an entirely misleading answer.

To the average dweller in a congested central area, the word 'flat' usually means an old-fashioned tenement lacking in convenience and amenity, and even in the simplest modern requirements of hygiene. Again, a person having expressed a preference for a house might well take a very different view if told that its location would necessitate half an hour's journey to work, whilst a properly equipped flat could be provided within five or ten minutes' walk. Questions need carefully framing if they are to produce useful answers, and I would suggest that any authority proposing to issue a circular of this kind may find it an advantage first to consult an authority, such as the Ministry of Town and Country Planning. In any case there will be little point in issuing



The best viewpoint for paper planning

such a questionnaire for the next few years, except where there is likely to be a free choice of accommodation, such as in a new town or a large L.C.C. Estate, which is really likely to go ahead.

Social Balance. I think my Minister in addressing you tomorrow will refer to the problem of getting 'balanced development', and I shall not anticipate what he is likely to say. I would just say this: plan as we may, the motive power of any town or neighbourhood can only come from the spirit of co-operation and goodwill expressed by its inhabitants. Can we help to create it by physical planning? I think we can at least provide the proper conditions for its development, but we have yet a lot to learn about the best way to do it. Sociologists are doing what they can by studying the habits of the people and the trends of the human mind with its longings and desires, and how these can be translated into satisfying physical environment, but we must avoid the danger of studying too much the effect and neglecting the cause. The Minister of Health said ugliness created ugly people, but I do not think that that is putting it the right way round. I believe that with a little more kindness and co-operation by everybody we shall find that a great deal of ugliness both in people and in physical environment will disappear.

Wherever that spirit of goodwill and neighbourliness has been present, mankind has got along pretty well. There is much we must leave to the individual; we can only build a worthy setting in which he can express his best qualities. We shall do little to create a civic spirit by shovelling all kinds of people together. Segregation is not snobbery; like clings to like, and whilst the neighbourhood should contain an average cross-section of the population of the town, I see little advantage in attempt-

ing a closer mixture of people of widely differing culture and income levels.

It is outside rather than inside the home that the major opportunities for social intercourse occur; the football field, the allotment, the Wives' Fellowship, the clinic, the W.V.S., the Territorials—these are the places where common interest fosters common understanding, respect and affection amongst all classes. We have still much to learn, and the development of the New Towns provides one clear field for experiment in social planning which we shall not neglect.

You will hear from other speakers much of intense interest on this absorbing subject of providing the right background to human activity. Let me give briefly what I conceive to be one or two of the important features in a town or neighbourhood plan conducive to the creation of civic consciousness.

The first is the provision of a definite centre or focal point which will be, so to speak, the climax of the plan. One requirement of a successfully planned town or neighbourhood is, to my mind, that any intelligent stranger can instinctively find his way to the principal centre and other key points, led by the plan and the design of the third dimension. We can all think of towns where this is the case, and it imparts a feeling of confidence, familiarity and friendliness. In large cities this is, of course, more difficult than in small towns, but it is still possible of achievement.

The proper placing of the various meeting places is another point of importance. The churches, libraries, public houses, clubs, dance halls, clinics, schools, shops and open spaces are focal points of communal interest and have a definite inter-relation, which will also be reflected in the neighbourhood pattern.

Whilst it is sometimes appropriate to the main arteries and central area of a

town, monumental planning which lays bare the entire framework of a neighbourhood by a series of straight roads is generally out of place. Interest will be created far more by withholding than by giving, and the qualities of surprise and contrast are indispensable.

Prefabricated Houses. Mr. Beaufoy said that the large number of prefabricated colonies were in most cases a scar on the landscape, even where thought had been given to their layout. It seemed likely, moreover, that many would be occupied for longer than ten years. He felt that tree planting was greatly needed on or adjoining these estates, but skilful handling and the use of appropriate types of shrubs and trees would be required. There was scope for the greater employment of landscape architects to advise on the appearance of estates of prefabricated and, indeed, other houses.

Architectural Control. He had not time for more than a brief reference to this. The Ministry had briefly discussed it in its *Handbook on the Redevelopment of Central Areas*. He could not emphasize too strongly the need for planning authorities to employ architects to advise them on all matters concerning building development. The object must be to secure that no buildings were incompetently designed, were unnecessarily conspicuous or incongruous, or built of shoddy materials; or to put it positively, that all buildings were well designed, fitted properly into their group and were built of good materials of appropriate texture and colour. There was plenty of room for individual expression while still ensuring harmony. The tighter control could be reserved for individual design of focal points, as, for instance, in the main shopping streets where there must be some control over the total height of buildings and uniformity in fascia levels. Housing authorities had, in general, themselves set a high standard in design, and it was reasonable to expect private developers to do the same. Planning authorities should have no hesitation in rejecting bad designs, and if they failed to secure improvement, should leave the applicant his right to appeal to the Minister. Obtaining harmony in appearance was rarely a question of expense, but of trained understanding of well-known principles. It was to the architect that we must look to secure that happy relation of the third dimension to the two dimensional plan.

DISCUSSION

Alderman Ross (Stockton-on-Tees) said that Mr. Beaufoy, like previous speakers, had criticized housing authorities for their bad layouts and designs, and it was time that someone defended them in that respect. However bad the layouts for which they had been responsible since 1918 might be, they were very much better than those of the Victorian era or of the speculative builder up to 1914. Moreover, it must be remembered that when, in 1918, local authorities were given responsibility for

housing, they had had no experience, and usually went to the borough engineer.

He had been chairman of a housing committee for 25 years. They had come to realize that planning was both a science and an art, and they were still learning. He had yet to see a layout on which architects were agreed; moreover, architects seemed to forget that to the subsidy granted by the Minister the local authority had to add money out of the rates, while at the same time fixing a rental that the average artisan or labourer could afford to pay.

Generally speaking, he thought that the

local authorities were doing their best. In Stockton they were laying out an estate of 400 houses, and two architects from Leeds who had seen it were so impressed that they had asked permission to bring a party of architects to look at it. If other authorities proceeded on similar lines and were willing to learn from the mistakes of the past, he did not think the criticism voiced that morning would be altogether merited.

Mr. Beaufoy said he could appreciate Alderman Ross's feelings, but he had said

that what was being done now was a great advance on what had been done previously, and the object of such a Conference as the present was that none of them, Ministries or local authorities, should be complacent. They had all a great deal to learn about layout. Alderman Ross himself seemed to be suffering from the delusion that good layout was more costly than bad layout, whereas in fact the reverse was the case; good layout was more economical than bad in road costs and everything else.

The President moved a vote of thanks to Mr. Beaufoy which was carried.

The Practice of the Leeds Corporation

By R. A. H. Livett, O.B.E. [A], City Architect, Leeds

Mr. C. H. James, R.A. [F], Vice-President, in the Chair

The Chairman said he was deputising for the President, who had an appointment which he was unable to cancel. He had himself a long experience and keen interest in housing, having started with Barry Parker and Raymond Unwin working for the Ebenezer Howard Cottage Society at Letchworth in 1912 or 1913. He had not, of course, done anything like as much housing as many local authority architects, but it had always been his greatest love.

Housing would completely transform the appearance of this country within the next twenty years. Other buildings were of minor importance by comparison. There were twelve or thirteen million houses in this country: the number of new houses required today had been variously estimated at between three-quarters of a million and a million and a quarter; also about nine million existing houses dated from before 1914, and it was questionable whether half of them were worthy of preservation. No care could be too great to expend on housing during the next twenty years.

Mr. Livett said that the city of Leeds covered an area of some 60 square miles, and housed over 483,000 people within its boundaries. Within a radius of twenty miles there was a population of four million people. Leeds was a university city, and a Civil Service regional centre. It possessed fine public parks and open spaces amounting to as much as 8 per cent of its total area, and it was within easy reach of some of the most beautiful Yorkshire country. But first and foremost it was an industrial city with a variety of trades, including wool textiles, clothing, engineering, transport, leather, printing and furniture.

Unfortunately, the city possessed few buildings of architectural interest. Kirkstall Abbey and Temple Newsam were owned by the corporation. In addition there was the Cuthbert Broderick Town Hall and some good churches. The city had little historic background. Nevertheless, it was a great city, but in achieving greatness

through its industrial enterprise it had become drab.

It could in no way, however, be regarded as a decaying city, but care would have to be exercised in replanning if they were to avoid the city becoming a centre of industry, where the workers in all income groups sought residence beyond its boundaries and used the city merely for what they could take out of it. Town planners would fail if the towns which they were now replanning did not instil into the minds of the inhabitants a strong sense of civic pride. This was to be found only among citizens who were content and able to live in a pleasant city and who were free to choose the district and type of dwelling in which they wished to live. Further, he suggested that they must be free to rent, buy or build a house, and that they must not be overburdened with heavy rate charges.

Mr. Livett continued: There are very few cities in England where the Industrial Revolution has left scars more noticeable than those in Leeds. Sir Ernest Simon, in his book, *Rebuilding Britain*, refers to this period as one in which our industrial cities gave birth to the slums. I want you to picture a city of 60 sq. miles, containing approximately 150,000 dwellings, including no less than 70,000 back-to-back dwellings all situated within the central area of some 7 sq. miles, dwellings at a density often as high as 80 to the acre, built in long, unbroken rows, without indoor sanitation, without bathrooms and food-stores, and with the living-room opening direct on to the street. Many of them contain only one bedroom. The clearing of 30,000 of the worst type of these back-to-back houses was included in the city's pre-war slum clearance programme, but, unfortunately the war brought about a temporary halt, when the work was half-way to completion.

In 1943 the city published its post-war housing Report—the first of its kind, I believe, to appear in print. This consisted of a statement of the estimated housing require-

ments of the city over a long-term programme of 20 years, and suggestions as to how these requirements should be met. It revealed that at least 60,000 new dwellings would be required in order that every family could enjoy the comfort and privacy of a self-contained dwelling. It also revealed that the city could not within its present boundaries provide sufficient land for the erection of all the dwellings necessary, and that only by accepting 20 per cent rehousing in flats in the central area could the overspill be kept down to about 80,000 people.

I do not propose to deal with the problems of overspill, but merely to say that any attempt to solve this problem by perimeter development would result in green belt encroachment. On the other hand, the development of satellites beyond the south and west boundaries would aggravate the congestion of the nearby small industrial towns, while to spread northwards would undoubtedly bring the city into conflict with Bradford and Harrogate or destroy the beauty of Harewood and a part of Wharfedale. This being so, it would appear that a solution has to be found by developing a new town somewhere beyond the eastern boundary.

If this is the decision, the city will be left with the responsibility of providing housing accommodation within its boundaries for some 40,000 families. With the object of putting this programme into effect, the city has been divided into a series of neighbourhoods, with the housing programme related to the school development plan and the health centre plan, each neighbourhood being planned in such a way as to provide housing accommodation for families of all types and sizes.

I regard housing as meaning something more than the building of houses. Housing, in my opinion, must be understood to mean the planning and building up of areas so as to form part of a major plan which, when completed, will provide pleasant places in which to work and play,

and in which houses are available at prices or rents within the means of all sections of the community. I look forward to the time when we can claim to have provided a separate and self-contained dwelling for every family, in which we can entertain our friends, where parental control can be exercised and we can hold healthy discussions with our own children round our own dining-room table.

When this becomes a reality, perhaps we shall have less cause to complain of vandalism, which, I regret to say, has in my own city reached unprecedented heights. Many children, and adults, now show a total disregard for other people's property, which brings me to the question of individual ownership. I believe that the happiest and most contented community can be established only where individual ownership is encouraged. I make this point because it is one of direct importance to the planner. I appreciate that it is an ideal which cannot be carried out to the full, but I suggest that we can, when planning our neighbourhoods, make provision for those who wish to do so, to become 'men of property'.

It is encouraging to find that the Government has made it possible for local authorities to consider applications for advances under the Small Dwellings Acquisition Acts, whereby houses may be purchased, and in respect of which advances may be made to buy houses under the Building Materials and Housing Act of 1945 up to a total not exceeding £1,500. In my own city advances amounting to over £472,000, covering 610 dwellings, have already been approved, and in addition licences have been granted to private builders for the erection of 1,105 dwellings, of which 954 have been completed and are now occupied.

In my opinion, however, individual ownership as applied to the home goes beyond the dwelling itself. We should also encourage the ownership of equipment, and thus bring about a freer choice of equipment, as opposed to a policy of installing standardized fixtures and fittings, which I suggest in time may result in robbing the people of their sense of individuality.

In putting this great housing programme into effect, we must not forget that we are planning and building for human beings, and, therefore, we must study the ways and habits of the people and study and respect local customs and use as far as practicable local materials. We must not be led into accepting standardized forms of planning, and believe that a plan for the South of England, though perhaps quite suitable for the people of the South, will necessarily be acceptable to North countrymen.

The Leeds programme provides for the building of three distinct types of dwelling: (i) flats, which can be divided into multi-storey buildings and buildings limited to three storeys in height; (ii) terrace houses; and (iii) semi-detached houses and detached houses. Generally speaking, the multi-storey flats will be confined to the central areas, while the three-storey flats,

terrace houses and semi-detached houses will be included in each neighbourhood unit, the population as far as possible being kept within the limit of 10,000 persons per unit.

Referring to the principles which had been adopted by the corporation, Mr. Livett said that he proposed to deal with them under the headings of layout, dwellings and services. In layout, it was first necessary to obtain a very correct record of the area to be developed. That meant a complete survey of the area, recording all natural waterways, notes on every tree to show whether it was worthy of retention as well as contouring down to 5 ft. contours. It was also important to have a very full knowledge of all the requirements of all the parties concerned, not only those of the various departments of the local authority but of outside people as well. It had been the practice in his city for some years to prepare a small scale map of the area in question, with a short memorandum giving details of the proposals and these were sent to each department of the Corporation, to the various churches, and many voluntary bodies, including the Y.M.C.A., Y.W.C.A., the Council of Social Service and the public utility undertakings. These parties were asked to acquaint the local authority with their requirements and, with the information so obtained, the planner was in a position to set about planning the estate.

In planning a neighbourhood unit, his city was planning within a given area for all sections of the community, for municipal and private enterprise, for light industry, etc. The linking up of existing woodlands by walking ways was an interesting feature. Land was also being set aside for houses of larger types, and other areas were being reserved for development by private enterprise.

On the question of roads, he knew that many advocated a reduction in the width of carriageways. He was very strongly opposed to one-track roads, and he thought that before making up our minds on this question we ought to discuss it with road users, such as the coalman, the dustman and furniture removers. The road 9 ft. wide often created a considerable amount of inconvenience, and was certainly not popular with tradespeople, nor with many of the tenants. His remarks applied equally to footpaths, and he always aimed at a minimum standard of 6 ft. He thought it wrong that a woman wheeling a pram should have to step off into the gutter, as was often the case with narrow footpaths, if one of her neighbours, also wheeling a pram, approached from the opposite direction.

The question of footpath access to houses was also important. He thought that it was wrong to make a footpath the only means of access to a house. This was also a matter to be discussed with tradesmen. Because he was responsible for housing he often received 'fan mail', both good and bad. Some of the bad was on this very vexed question of footpath approach: he had even had deputations from tenants about it.

The grass verge did a great deal to dispel the monotony of many housing estates, but attention had to be given to its protection. It was far better to have a verge on one side of the street only, of a minimum width of 6 ft., than to put a 3 ft. verge on each side. It was also not sufficient to lay down grass and expect it to grow. He had found that to give the grass a border of stone or concrete and to raise it about 2 in. above the footpath level did much to keep it tidy.

He found that the cul-de-sac was not popular, though he knew it got the architect out of many planning difficulties. People did not like to live in a close where there was no alternative way out, and it often necessitated walking twice the distance to reach the place required. Also the approach to a cul-de-sac, if one must be provided, should be uphill and not downhill.

Mr. Livett continued: While we are on the question of roads, I should like to refer to street furniture. Often architects pay great care and attention to planning their estates, often to find after a time that the streets become littered up with telephone kiosks, police boxes, and so on. The highways department put down a grit box, the medical officer wants public conveniences, the transport department want a shelter, the publicity officer wants a notice board, and so on. I suggest that by co-operation something can be done whereby at important points in these newly-developed areas attractive little buildings can be erected where all these necessities can be brought into some kind of order.

Then there is the question of trees. It is important, as I mentioned earlier, that we should have a very accurate record of all the trees in the area, with a note of those worthy of retention. With that record it is possible for the architect to make use of those trees and show them off to the best advantage, and also to plant more trees. I suggest that there is a great deal to be said in favour of planting trees not in straight rows, as we have been accustomed to see them in the past, often in the grass verges, but in the tenants' gardens. If you give a tree to the tenant, the tenant will take an interest in it and will see that youths do not destroy the bark, which commonly happens in many of our industrial cities.

The Minister of Health has expressed his dislike for brick boundary walls, and I think that we all agree with him. Much can be done by using live hedges for fences, such as thorn, or a mixture of thorn and privet. If you want a little colour, groups of flowering currant will give a delightful display in the late spring. If, however, we are going to use live hedges for our front fencing, then during their early growth they must have some protection. That can be done without much cost by providing a dwarf fence of post and rail. Here again, however, it is not sufficient just to plant these hedges; during their early growth it is important that they should be attended to by people who understand hedges. The policy in my city is that during the first three years after planting, the local authority takes on the

responsibility of cutting back these hedges. The result is that they bush out at the bottom. After three years, the housing manager informs the tenant that the hedge is handed over to him, and he takes on the responsibility for its maintenance.

With regard to open spaces, in the years between the wars it often happened that the value of large areas of open space was lost to the estate generally, because it became the practice to plan houses backing on to playing-fields instead of fronting on to them. The large playground of a school, however, may become an amenity to the estate as a whole, and not be enjoyed only by the students and by the few fortunate tenants whose houses back on to it. I know the answer that some of you will give me on this point, namely, that the Ministry of Education will have something to say about road charges, but this is something that we as planners ought to fight; it is worth fighting for.

Some people seem to regard the community centre as a building. I do not know why. I like to think of a community centre as a planned area, so planned that all the social and commercial services can be brought into that area. To the architect, the actual buildings which will eventually find their way into the area are not so important as to provide a sufficient area or areas of land, as the case may be, in the early stages of planning, in order that all the necessary buildings can be brought in as and when required. Public swimming baths, the social centre, the library and a small art gallery may be brought into a park, while in one instance planned within the park land are blocks of flats for single women and a hostel for young people.

Now we come to the dwellings. The policy in Leeds is to provide types of dwellings based on need. The general practice during the inter-war period of building three-bedroom parlour and non-parlour houses has been strongly opposed, and as far back as 1934 it was the practice in Leeds to develop all new housing areas to have an allocation of 30 per cent for old people, 10 per cent two-bedroom houses, 45 per cent three-bedroom houses, 10 per cent four-bedroom houses, and 5 per cent five-bedroom houses. At a later date, when from the housing returns it was found that a change in this allocation was necessary, the 30 per cent for aged persons was reduced to 15 per cent, the proportion of two-bedroom houses was raised from 10 per cent to 30 per cent, the three-bedroom type was reduced from 45 per cent to 25 per cent, and so on.

This is interesting, because a review of the 23,000 applications on the housing register in my city shows that 65 per cent of the applicants require two-bedroom dwellings, and this has resulted in the city council approving an allocation of types in the ratio of three two-bedroom houses to one three-bedroom house, which in my opinion is a very wise policy to adopt, especially at a time when we are faced with such a shortage of labour, materials and equipment. These two-bedroom houses

meet an immediate need, and at a later date the families can be transferred to larger dwellings if there is any danger of overcrowding. This is a simple, routine process with any efficient system of estate management.

The types vary from one bedroom to five bedrooms, and provision is made in all neighbourhoods for these allocations. I should like to refer to a few special features which do to some extent affect the layout. The typical three-bedroom non-parlour plan provides for the outhouses coming within the curtilage of the dwelling. There are two reasons for this. One is that we maintain that in the North of England, particularly in winter, the housewife does not want to have to go round to the back of the house to reach the outbuildings; there is a great deal to be said for making them accessible from the side door. Secondly, the provision of a porch between the side door and the fuel store and lavatory provides some cover for a young child to play or for a pram to be placed when the mother is working in the kitchen, furthermore, this form of planning has proved to be much cheaper when dealing with undulating sites. It is no uncommon thing for us to build houses on hillsides with gradients of 1 in 8, and innumerable difficulties are created if the outbuildings are to be separated from the dwelling itself.

Another important feature of this plan is the provision of a large entrance hall and direct light and ventilation to the staircase. I want to say a little more on that point when I come to the question of terrace houses.

It may be of interest to some of the delegates if I give our experience in Leeds on the convector heating unit. We have carried out in my city over the last three years experiments with the convector heating unit, and it has now become the policy of the city to adopt the convector heating unit in all municipal houses, as a result of these experiments. We are still old-fashioned enough to stick to the back-to-back grate. People like it for many reasons: it is economical, it provides a fire in the living-room, heats the water, and provides some warmth to and cooking in the kitchen. Attached to the back-to-back grate is the convector heating unit.

Some people doubt whether it is a really efficient system of background heating for bedrooms. We have tried it out over a period of three years, and the result is most satisfactory. I should like to give you very briefly the result of one of the latest tests. With an outside temperature of 52 degrees F., the temperature in the bedroom of a house where convector heating had not been installed was 56 degrees F., whereas in a similar bedroom in a house having convector heating the temperature was 68 degrees F. That is a variation between similar bedrooms, facing in the same direction, of 12 degrees F. We have found that to be fairly consistent, and I think you will agree that it is satisfactory.

I have already referred to the outbuildings forming part of the house. Where

the levels permit, the annex of the adjoining house is connected up by means of a screen wall, but in most cases the levels are such that retaining walls have to be erected between blocks and the question of a screen wall becomes very difficult.

On the vexed question of terrace houses I differ from some of my colleagues. Aesthetically there is everything to be said in favour of terrace house development; however, we have to face the difficulty of undulating sites, which are common in the North of England and other parts of the country, and the fact that on undulating sites terrace development may be more expensive than development by semi-detached houses. Further, I suggest that we must give very serious consideration to the question of back entry to terrace houses.

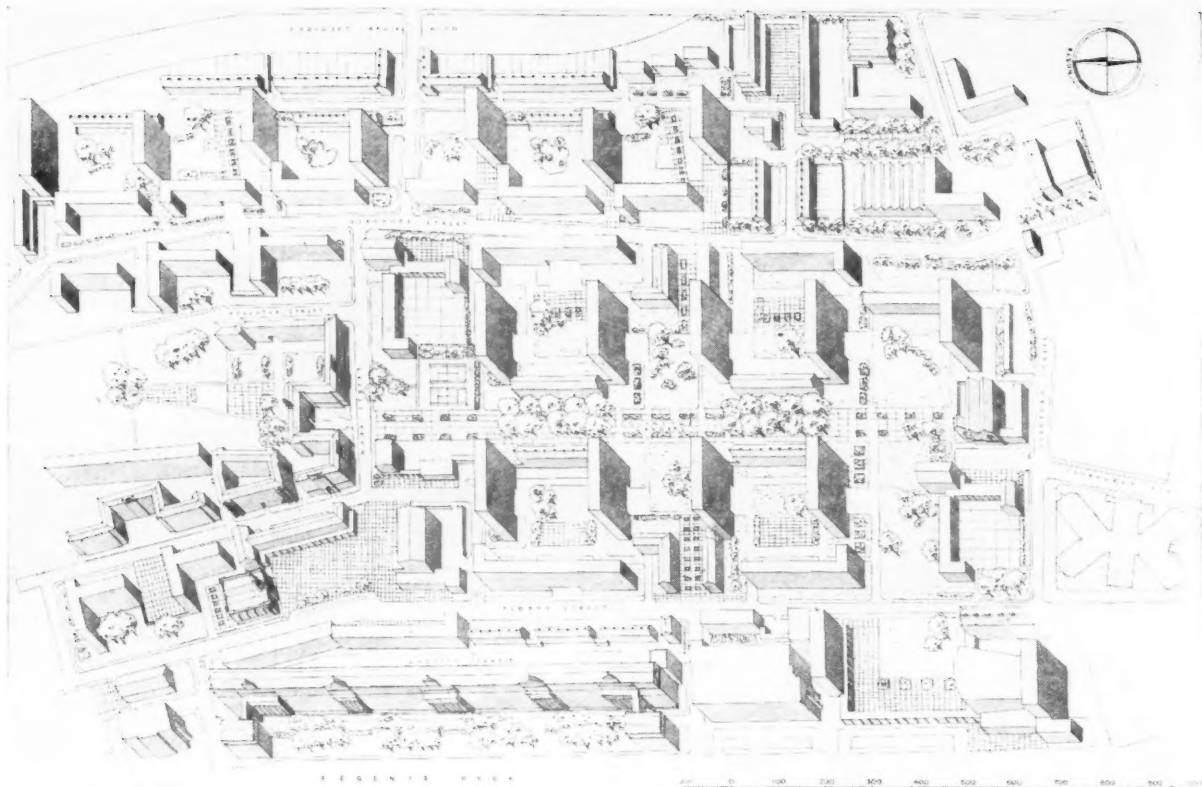
Mr. Livett said that he had planned and built a number of terrace houses, but had found from the management side that as soon as an end house of a terrace became vacant all the tenants in the middle houses applied for it. It was essential to have a satisfactory method of back entry. Back lanes were all very well, but he suggested that the police and the street lighting department were opposed to them, as were the dustman and coalman who had to go down the back lane and walk right through the gardens to reach dustbins and coalsheds. It might be that plans would be produced which overcame these very practical objections.

He had yet to discover a way of planning a terrace house which provided a satisfactory means of staircase access with direct light and ventilation. He was convinced that tenants did not want terrace houses.

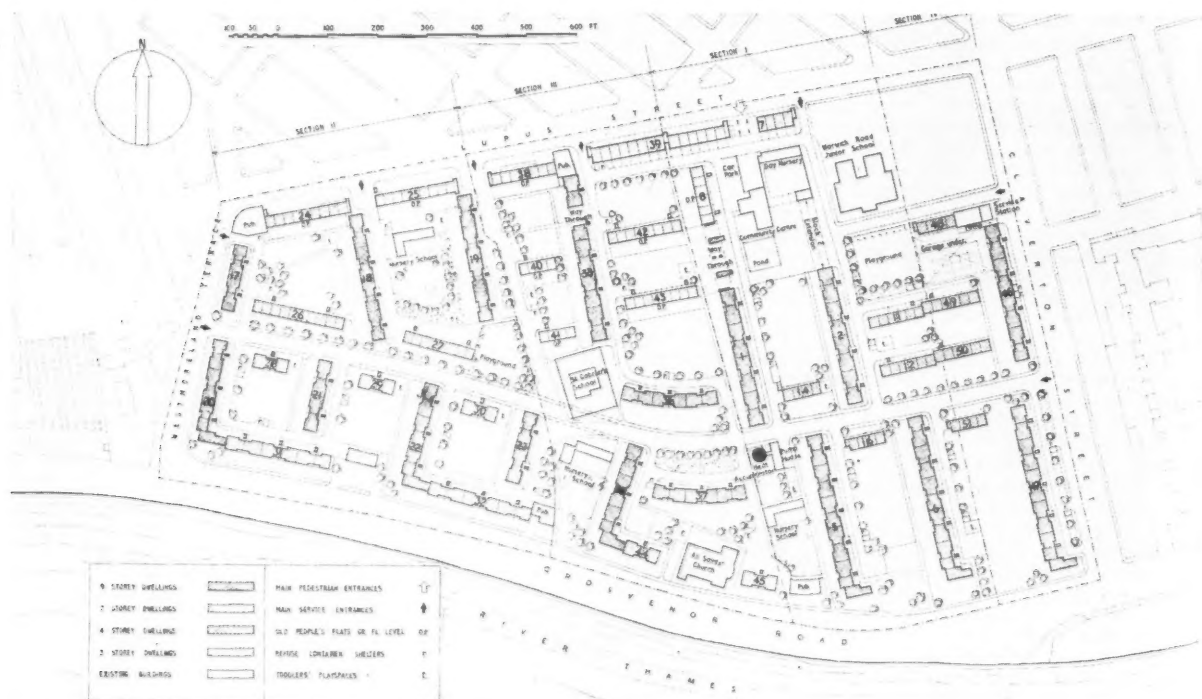
Mr. Livett continued: Then there is the question of provision for aged people in our new units. We are told that by 1951 there will be 116 in every 1,000 of our population over the age of 65, and that by 1971 the figure will have risen to 171 per 1,000, whereas in 1937 the figure was 84 per 1,000. My city has been very much alive to the need for houses for aged people, and up to now we have provided over 3,000. It is necessary that these houses should be planned near to shops and transport, and within easy distance of the community centre, and that they should be mixed up with the general development. We must not lose sight of the fact that old people and young people get on very well together. That is very important. Do not be afraid to put groups of aged people's houses facing the playing fields of a school; old people like to be near to young people.

In my city we provide three different types of dwelling for aged people. The first is the flat, in two-storey buildings. Some people criticize the use of the two-storey flat for this purpose, but we find from experience that quite a number of old people say, 'I have always been accustomed to go upstairs to bed, and I want to continue to do so,' and there is something in that. Further, when you provide this type of accommodation you are providing for the ageing as well as the aged, and with a good system of house management there is a

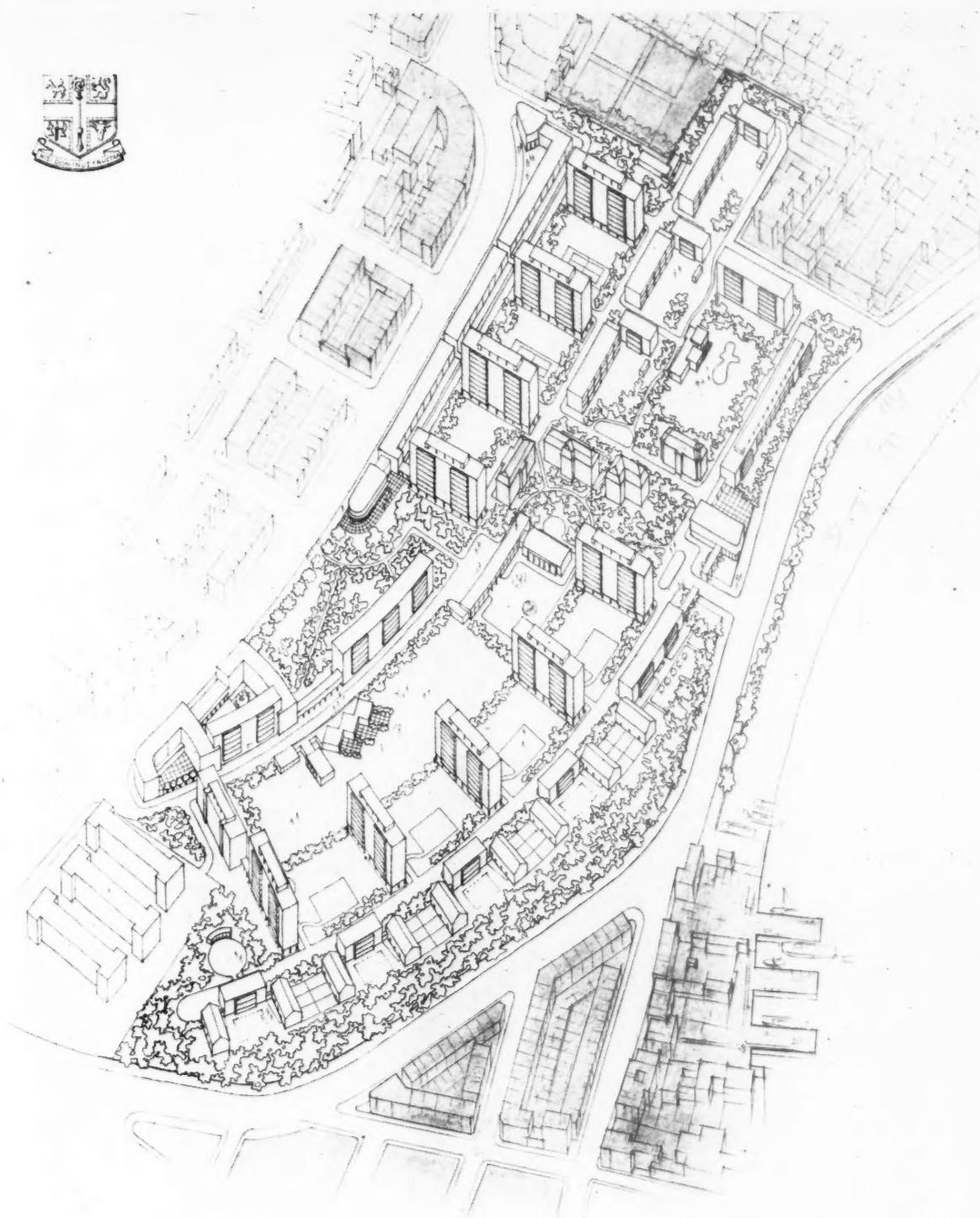
continued on page 398



Borough of St. Pancras. Regent's Park redevelopment area. Frederick Gibberd [F] and G. S. Bainbridge, Borough Engineer and Surveyor



Westminster City Council. Pimlico Housing Scheme. Powell and Moya [44]



EDWARD ARMSTRONG F.A.I.B.A.
19, MANCHESTER SQUARE W.1

Redevelopment scheme in West Chelsea. Edward Armstrong [F]. This drawing and the two on the opposite page are reproduced from the Exhibition of Housing Layout which accompanied the conference

good deal to be said for putting ageing people on the first floor and the aged on the ground floor. It is surprising how these people pal up, the younger looking after the older. One very important feature of such a plan is the provision of a small balcony, sheltered from the keen wind. Old people like to sit outside.

Many of these flats have one bedroom, but for some people there may be need for an additional bedroom. Many old people have friends and relatives who like to come to see them, and there is nowhere for them to sleep in a one-bedroom dwelling. Some old people can afford a little extra in rent and rates, and for them the provision of two bedrooms commends itself. On the other hand, there are many who do not want to be burdened with the extra annual charge, and for that reason we have developed another type of plan, whereby the units are built in groups, and at the end of each group there is a bedroom with a little lavatory and its own front door, which is put under lock and key, and any of the tenants in the group can rent that bedroom for one night or for a week or longer, and in that way have a friend or relative to stay close to them. The arrangement is simply made by the tenant with the housing manager during his weekly round to visit and collect rents.

I suggest that in all our future neighbourhoods we have to pay some regard to the needs of those unfortunate people who suffer from tuberculosis, but it is important to arrange the houses for them in such a way that they cannot be picked out by the general public. In my city this matter has been under consideration for some years, and for the last 15 years the city has been providing 5 per cent of all municipal dwellings for T.B. families. The houses are of similar type to the others, built in exactly the same materials and to the same designs, the only differences being that they are north aspect houses, with the principal bedroom and living-room facing the back garden, and the living-room is planned with sliding steel casement windows on two sides, which can be opened right back, while the bedroom is provided with a separate lavatory basin.

Another type of accommodation which I think is necessary, particularly in industrial cities, where so many women are employed, is the self-contained dwelling for the single woman. We find, particularly in the clothing trade, that as women get older they are not content to live in furnished rooms or lodge with a family; they reach a stage when they can afford to have a place of their own. I think that we should pay attention to this need, and provide in our plan for flats for single women, built two or three storeys in height in small units of 20 to 24. This has been done in my city and has met with the full approval of all concerned. They are small, labour-saving dwellings, with a living-room, a bedroom, a small kitchenette and a bathroom and lavatory basin combined. We find that it is possible to build these in groups, with a caretaker on the ground floor responsible for keeping the grounds and staircases neat

and tidy, while his wife makes her own contracts with the tenants to do odd jobs in the way of cleaning and cooking. These dwellings are being let at an inclusive figure of 13s. 4d. a week, rent and rates.

There is also a need to provide hostels for young people, built either on the edge or right in the public park, near to the tennis courts and other forms of outdoor recreation. In our neighbourhoods, where there is a public park we bring these hostels to the fringe of the park. They are being built in small groups of two types. One type consists of a bed-sitting room with a little utility room and its own bathroom and lavatory, and the other consists of a bed-sitting room only, with batteries of bathrooms and lavatories at each end of the unit. Linked on to one unit is a common room, dining-room, kitchen and caretaker's quarters. That is a form of development which can take its place in almost any neighbourhood.

There is a further need in our large industrial cities, and that is for hostels for the casual and semi-permanent lodger. There is a considerable movement of workers in our large industrial cities, and something will be required eventually to replace the common lodging house. We carried out in the inter-war period a somewhat bold experiment in this direction, and built a large hostel with 516 separate bedrooms, not dormitories or cubicles, and planned on modern hotel lines. Each resident has a small bedroom of his own with natural light and ventilation, electric light and local switch, and uses the hostel in the way that you or I would use a hotel. On the ground floor there is a reception office, which is common to both men and women, with the men's entrance on one side and the women's on the other. There are common rooms, games rooms, dining-rooms, writing rooms, and so on, for men, and similar accommodation for women. In the basement we have a laundry, a barber's shop, a boot repair shop, a wash-house where residents can do their own washing and ironing, and a large laundry where the household linen and the residents' washing can be done weekly. There are four floors above, divided into small bedrooms. The planning is on the continuous corridor principle, and the accommodation for women and men can be adjusted by the closing and locking of doors at certain points along the corridors. That hostel has been running in Leeds for the last ten years. When it was first opened it was possible to let the bedrooms for 1s. a night, or 6s. 6d. a week. Wages and other costs have gone up, and the city has been compelled to put the price up to 1s. 8d., but it has been run by the city without a charge on the rates.

I should like to deal very briefly with the question of flats. It would be wrong not to say a word on this point, because I have been accused of being somewhat flat-minded, and my city has been responsible for a good deal of flat development. I know, of course, the objections to flats, and I am not proposing to raise that issue, but merely to describe briefly what the policy

in Leeds is. We have over a number of years developed flats in the city varying in height from two storeys to eight storeys, and it is intended to continue with this form of development, but the city has laid down certain principles: (1) Every flat must have direct staircase access; (2) every flat must have a self-contained balcony. I do not propose to go into all the points which might be raised against the continuous balcony; we all know it robs the tenants of privacy and heavily overshadows the rooms below.

The third point is that every flat which is four floors up or more must have a lift. I know, of course, that many people object most strongly to introducing automatic passenger lifts in working-class dwellings. In 1936, however, Leeds decided to put into one scheme, at Quarry Hill, no fewer than 88 automatic passenger lifts. There was a great deal of criticism, but the result is interesting. These 88 lifts average 5,000,000 journeys a year, which works out at 14 per flat per day. They are used by the tenants, including the children, by all the tradespeople, and by any visitors who come to the estate. From 1936 to the present date there have been three accidents. Personally, I think that that is a very good record; it speaks highly for those responsible for the designing of the lifts, and it shows that working-class people are just as capable of looking after themselves as people of any other class.

Refuse disposal was, he said, of great importance in large housing schemes, particularly in central areas. We had gone on improving our heating and lighting services and yet still tolerated the dustbin. He had asked many dustmen if they enjoyed their job, but he had never yet found one who did. It was going to be increasingly difficult to find people to accept this work. He felt, therefore, that planners should pay attention to the systems whereby refuse could be disposed of by other means than the dustbin. His city had done pioneer work in introducing the Garchey system of refuse disposal in one large block of flats. He had been responsible for installing the system and for managing and maintaining it and, as a result of eight years' experience, he found the system worked well. His city had decided to continue with this system in all future flat developments.

After describing the apparatus installed in the kitchen and how it is operated by the housewife, Mr. Livett said the refuse disappeared with the waste water going by gravitation to a collecting pit. There were several of these pits distributed round the estate from which liquids found their way to the sewer by an overflow. The refuse, liquid and solid, left in the pit was removed by suction to a storage tank at the disposal station where it could remain for several days if necessary. The refuse was next dehydrated, the liquid draining off through a perforated drum in the dehydrator and finding its way to a sewer, the solids being slowly dried on a series of baffle plates before falling into the incinerator. The system was simple and maintenance costs low. The capital cost of the

system applied to flats in Leeds before the war worked out at £25 per dwelling, and its amenity cost in terms of maintenance was about 2d. per week: in other words, the system now cost the city about 2d. a week more than the normal system of dust-bin collection.

DISCUSSION

Dr. Ronald Bradbury [F] (Director of Housing, Corporation of Glasgow) said that as a fellow-David battling with the Golgotha of bad housing and slumdom he felt that the more that was known about the way in which other people were tackling the problem the better for everybody. Probably everybody attending the Conference could describe horrible conditions in the towns from which they came, and as far as Glasgow was concerned he could put in a fairly good worst to compete with anything found elsewhere; but, although things were so grim, he believed that if the mental energy which had been devoted in the past to telling people how bad housing conditions were could be diverted to the solution of the problem a great deal could be done.

The problem before us was, while safeguarding our industrial position, to see that our cities and towns were made happier and healthier places in which to live. Mr. Livett referred to vandalism, and that was present also in Glasgow and in many other places. It showed that housing was not something to be dealt with on its own, but must be considered in conjunction with health and education. The three must go forward together, and if social progress was to be achieved those who were responsible for housing must keep in touch and sympathy with those who were dealing with education and with health, even though it went against the grain to hand over such large areas of good housing land to the schools.

He would emphasize what had been said about the necessity of understanding the needs and desires of those for whom houses were being provided. For instance, he had found from experience that the L-shaped living-room was not a success with certain types of people. As an architect it appealed to him, and he would like to have a room with a dining recess of that kind, but it was too big a change for some families to make, and they used the square sitting-room end and left the dining recess in bare isolation.

Mr. H. A. Clark [L] (Architect, Wrexham Borough Council) said that while a good deal had been said about the need for variety in appearance, accommodation, and the provision for different income groups, he was a little nervous about the emphasis on 100 per cent community layout on local authority housing estates. There were still people who, while not anti-social, and in fact contributing to the welfare of the community as a whole, did not desire in their own homes to enter into a community life and who required privacy not only within the four walls of their house but within its setting. Today it

was becoming increasingly difficult for them to build their own homes, and they had therefore to accept houses planned and built for them by local authorities. It should not be impossible when planning estates to bear that in mind, and, while providing a community life and environment for most of the houses, to set aside some portion of the estate for people who desired some privacy. He had been interested to hear from Mr. Livett that some detached houses were being built in Leeds, and he hoped that the sites of those houses were from the point of view of environment equally detached.

The Chairman, on the question of terrace houses, said that while realizing their disadvantages he would rather live in a three-storey terrace house than in a flat in a three-storey block of flats or in a very small detached house. He could not think how architectural results were to be obtained by the design of single houses or by the

repetition of everlasting pairs. There were far more difficulties in flat design than in terrace house design. He made those remarks not as chairman but as a member of the audience. As chairman he wished to move a cordial vote of thanks to the author.

Mr. Livett, in reply, agreed with Dr. Bradbury that there was room for all types of development, but advised architects to be sure of their ground before going in for terrace houses on a large scale. On the question of community development, he said that he had tried to make it clear that in a well-planned neighbourhood there should be provision for all sizes and types of dwelling, and areas should be set aside where people could build in their own way, and not necessarily forced to buy a house erected by the speculative builder or to rent a local authority house. A true neighbourhood must provide for the needs of all sections of the community.

Housing in Rural Areas

By G. A. Jellicoe, M.T.P.I. [F]

Mr. C. H. James, M.A. [F], Vice-President, in the Chair

I SUGGEST THAT YOU should spend the next half hour with me in coming out into the countryside and studying on the spot the problem of rural housing. If you put up an ugly house in Leeds it may harm an area of two or three hundred yards round about, but if you put it in the countryside on the top of a hill you may destroy the beauty of something like ten square miles. You have all seen it happen. I want you to study with me the reasons which may help to produce good rural housing which will not spoil the landscape. Let us start by cutting out aesthetics altogether. I shall come back to them, but let us forget about them for the moment and look at the matter from the logical point of view.

I would compare this problem of housing the agricultural worker to that of housing his fellow-worker, the bee. The bee has a similar range of activities—about two miles from home, the distance which she can reach 'under her own steam'—and retires at night to her group, the hive, which is about the size of the town of which Mr. Beaufoy spoke earlier; it contains about 80,000 bees. The beehive is in fact the most efficient development imaginable, if logic came to rule the world, and throughout this talk I should like you to have at the back of your minds this aim at which the reasoning mind might arrive. We might in a thousand years arrive at the same sort of life that the bee is living at the moment.

It is very difficult to see why we should not do so, because it is so sensible. But there is something rather terrifying about the domination of reason, of the intellect, over our lives, and about the idea that ultimately we might get to the life of the

hive. It is interesting to find from the talks this morning that those in authority at the present time are aware of this and are trying to counter it by some appreciation of the ordinary emotions of the human being.

Having arrived in the countryside, let us take any one house, in any part of the countryside you like, and let us examine the reasoning that builds up that landscape so that you and I, looking at it, can say that it seems to us agreeable and enjoyable. First of all, we should consider the reasons that have led to it being where it is. It is from that point that our aesthetic feelings will start, but we must first consider the matter scientifically, because there is no greater enemy to good design than the sentimental approach: 'This is a beautiful building, built in the past, and therefore I shall build one exactly like it.' That is death and destruction to all good design.

First, then, it must be near a road; it must be accessible. That road and that house become part of a man-made design. If the road is large and the house is small, so that they are out of scale, probably a service road will be put in, which will restore the scale between the road and the house. Secondly, the house will not be put at the bottom of a valley, where the land is not properly drained; it will be on slightly rising ground. If you look at the cottages and villages which have been built in the past, you will see how well they are placed in relation to natural drainage. That is particularly true of the villages. Fog and cold air coming down a valley are a danger to mankind, and by trial and error men have found the right place to build their houses.

The house will never be at the bottom of something, but on slightly rising ground.

A third influence, and one which we are apt to forget, is wind. We have to design primarily for winter conditions, and the governing factor is wind. A block of houses put on the top of a hill is thoroughly bad from the point of view of wind. It is cold; it is exposed all the way round; nothing grows in the gardens, except those sensible vegetables which grow underground, like carrots and potatoes. The human being intensely dislikes exposed positions, and the cottage of the agricultural worker will be sited so that the rising ground may act as a windscreen as much as possible.

We are beginning to see, therefore, how the house is fitted into the landscape. That is important, because when you fit something into the landscape it means that it is aesthetically good. The use of trees, for instance, in urban housing layouts is mainly for the pleasure that they give, but the most important of the real uses of a tree historically is probably to give shelter from wind. You should therefore try to get within a certain distance of trees, if you can; if not, you should plant trees, not too close, so that they cut off the light, but within a certain distance. You then get that feeling of the house protected, the trees and the house forming one design. From that you start to build up a very considerable aesthetic; so that your basic form is derived from purely functional things; it is astonishing that these very simple rules, the observance of which does not cost anything, are often forgotten.

To come to the house itself. From the point of view of wind and from the theory of fitting the house into the landscape, I should like to see the height of the house, the minimum height which is laid down, dropped by at least a foot, 6 in. for each storey. I think it is fantastic that these high buildings are still being put up in rural areas; I cannot make out the reason for a bye-law of this kind. I should like to see the length of the house running north and south, with the windows on the east and west sides, while on the south side I should like to see a bare wall with an espalier on it. I do not want to see that become universal, of course, but I think that we are apt to forget the great power of the sun on brickwork as a means of growing plants. You probably all know old houses where advantage has been taken of this.

The basic reason for this siting, however, is that it is not important for the agricultural worker that the sun should come into the room. What is of prime importance is to dry out the house, and a long north side should be avoided, because in the winter it will not dry out. I like to see a house with the maximum of sun all the way round, and with the thin side to the north, if possible. That is not a universal rule, and there may be obvious reasons why it should not apply in some cases.

In the immediate environment of the house, since we have some material which we have saved, I am very much in favour of small curtain walls going out. Unlike Mr. Livett, I would not have the outhouse

as part of the house, but would link it with brick walls to the house and use those walls as wind protection. For a rural house, I would have a strong porch to the front door. It is not necessary in the town, but in country areas it seems to me to be essential. We gradually get, in this way, the picture of a house with its accompanying walls which is aesthetically related to the lie of the land.

If we have any money left over I think that the question of the garden, even in the country, is of prime importance, not, perhaps, so much for flowers, but for a kitchen garden. Those of you who have not studied the productive capacity of a small brick-walled garden with its radiant heat will be surprised at what that garden can produce. Probably in five or ten years the production inside the garden will have more than paid for the walls.

This use of the garden seems to me to be paramount, and here I join issue again with what the Minister of Health said. I think that the American way of life is entirely unsuited to this country. We require privacy both in our home and in our garden. I shall always stand for that; it is part of the genius of the British way of life. I should also like to remark, in passing, that the form of pollarded tree to which Lewis Mumford referred is one which was highly developed on the continent, but that the great contribution of the English school of landscape gardening is, significantly enough, the development of the *individual* tree.

We have not yet dealt with materials and colour. So far we have dealt with matters of universal application, in every age and in every part of the country, but when we come to materials we are faced with a different problem, and a very difficult problem. It is obviously nice to use local materials; they fit into the countryside, and generally speaking the use of local materials gives quality of surface. This quality of the surface of the material—its texture—is of paramount importance. It is logical that in the country you should use a slightly broken texture, because it does not show weathering so much. Generally speaking, a slightly rough brick or stone will always look well and last longer than a rendered surface, and aesthetically it relates the quality of the building to the surrounding foliage. In nature there is no such thing as a dead flat line; everything has a slightly broken surface, and if you produce that in the materials of your building, as has been done throughout history, it is very agreeable. We are faced today, however, with the problem of the prefabricated house, which can be put up in the countryside without any use of local materials whatever. Therein lies a very interesting problem.

I am one of those who think that the standard of local authority rural housing in the last two or three years has been astonishingly good. This is largely due, I am bound to say, to the points laid down by the Ministry of Health and to the schemes being given out to architects. Up and down the country you can see very good buildings indeed, and I have nothing

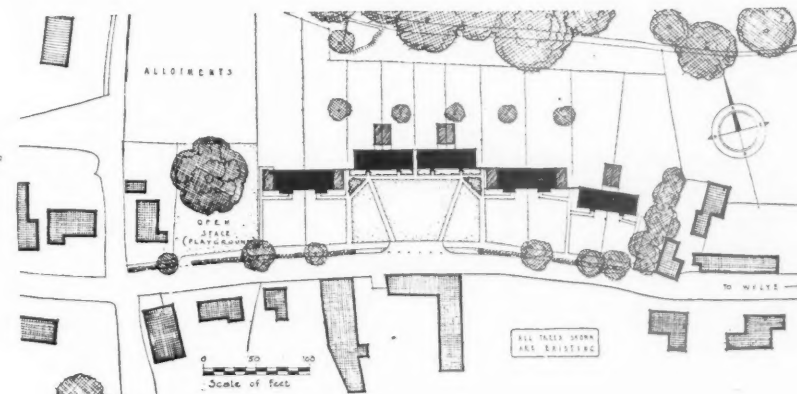
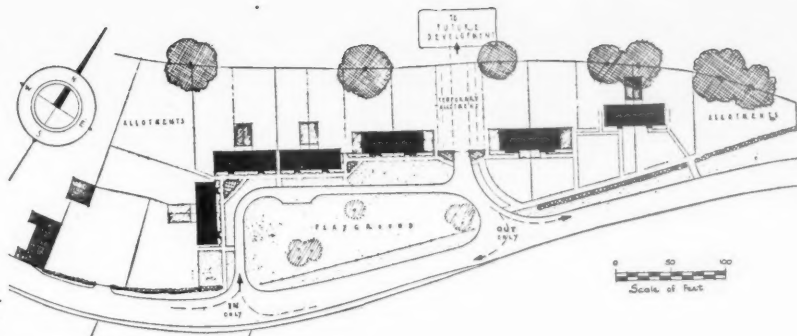
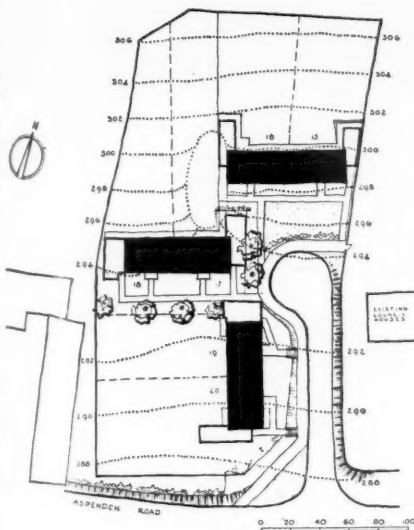
to say against the inside except that it is much too high. The trouble at the present time is that we see this job with the city man's eye; we think that we are designing for the city worker, whereas in fact we are designing for the agricultural worker, who spends his day with the dome of the sky above his head, and when he gets home he does not want to find huge windows and high rooms.

Mr. Jellicoe said that he was prepared to accept the idea of a standard plan for the house, or rather a limited number of plans. That would not mean that within this standard unit a world for the individual could not be created. Such a world was being created today because the greatest singers and musicians could be brought into a room through the B.B.C. and the gramophone, and personal libraries could be built up. In fact, that individual world could be a very wide one indeed.

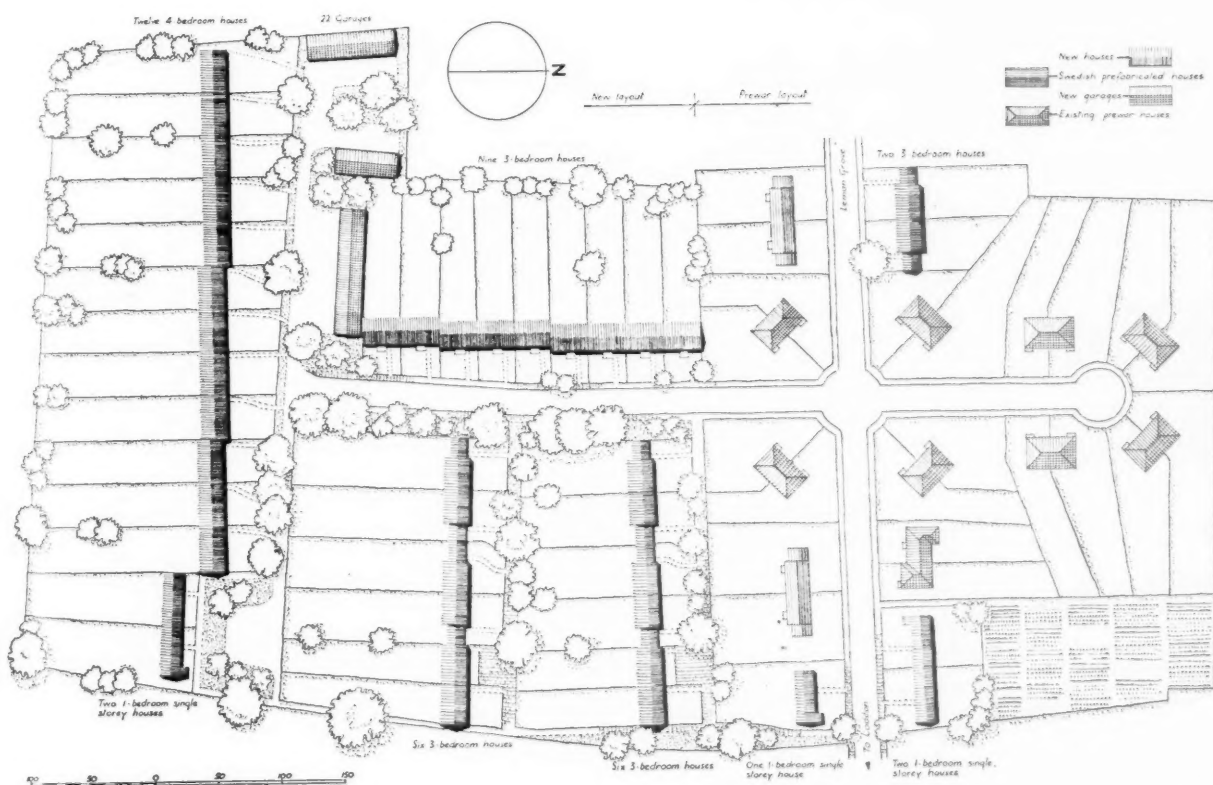
Housing had first been a rural affair. Men did not bother about aesthetics until they started to be civilized. It was aesthetics which raised them above the bee. Scientists and engineers were really bees in their professional capacity. Artists, on the other hand, created something in the world which belonged to mankind as opposed to any other form of animal. It was the creative architect who produced the original design, though always at the back were the good solid vernacular, the instructions of Ministries, the basic rules.

Mr. Jellicoe continued: Generally speaking, I think it may be said that man started all his housing from the country. He began with his cave, and then came the village, and the mediaeval city was a growth of the country. The Renaissance, however, meant the domination of man's reasoning, and reasoning produced the mechanical world, which led to the modern city. One of the troubles which we experienced in the years between the wars was that the rather shoddy modern mechanical city was backflowing into the countryside. In such places as Welwyn Garden City you can see the beginnings of an effort to reconcile this terrifying mechanical world with the original country basis from which we all sprang. It will be interesting to see whether in our new towns we can reconcile these two basic forms, that which springs from the country and that which springs from the mechanical world.

Mr. Livett said it was admirable to ponder on other people's problems, because very often in that way you solve your own. Recently I had to do a report on housing in Central Africa, and for this made a special study of housing in the Congo. I was faced there with going right back to the start and considering what housing really was. In Leopoldville, the capital of the Congo, a city has been laid out for the negroes on geometrical lines. It has been divided into 12,000 plots, each plot being 25 metres square. It has been very fully planted, so that as you walk about you simply see straight green avenues. The Africans who have been given these plots are subject to very little control, and each is allowed to build on his site exactly



Four rural schemes from the Housing Exhibition. Above: layout for six houses at Aspenden, Braughing R.D.C. Mauger and May [FF]. Top right: Chapmanslade, Warminster and Westbury R.D.C., G. Blair Imrie [F]. Right: Stockton (10 houses). Warminster and Westbury R.D.C., G. Blair Imrie [F]. Below: Loddon, Norfolk, R.D.C., Tayler and Green [FF]



what he likes. The effect is astonishing. Much of it is a slum, but there are at least four trees on every site, which have grown so well that it was like being inside a wood; you did not see a lot of houses all at once. As you walked in this tropical forest, however, you saw raw humanity doing exactly what it liked.

I thought this was architecturally ghastly, and against every principle of town planning, but in spite of this I felt that all humanity was represented there. Some of these Africans have been very successful in making money, and one man had actually a two-storey house in the best Brussels style, while others had kraals; but every home was well arranged on the site and the logical reasoning behind the arrangement was sound.

Elsewhere private concerns were laying out estates for their negro employees almost in the way that a local authority lays out an estate in this country. As with most African housing in British areas, they simply said, 'We will spend so much money on each house, and it is bound to come out all right.' They got good architects, and they produced a standard plan for the house, the standard being infinitely better than at Leopoldville. They put all the money into houses and none into trees. The drainage was reasonable, whereas that at Leopoldville was good only owing to the soil. Everything was put on paper before the directors—so much for houses, so much for schools, and so on. Nevertheless, one came away from the sites with a feeling of the lack of humanity.

I think that somewhere between those two courses lies our line. It is a question of the relation between control by the State and the development of the individual. Once this responsibility belonged partly to the State and partly to the great landowner. It has been passed on to you. You carry a great responsibility, and it is in your hands to develop it in which way you like.

DISCUSSION

Mr. G. Blair Imrie [F] said there would be general agreement that today the nation must have a thriving countryside, a very greatly increased food production and contented country people. By far the most important factor in attaining those ends was the production of good houses, equal in comfort and convenience, including the provision of all services, to the best houses of the towns, and the bringing of existing houses up to the same standard. He would emphasize the importance of reconditioning. Now that the few fortunate people were moving into good, new houses, the tenants of the many old sub-standard cottages had a real sense of grievance. The modernization of the old cottages must go on, and be complementary to the building of new ones.

It was a mistake to think that the countryman thought first about his rewards; he had a very deep sense of his duty to the soil and to the country. His wage now compared favourably with that of his urban cousin, but that was not enough; to keep the best men and women in the



Rural housing layouts from the exhibition. Above: model of Bryn Farm Estate for the Brynmawr and District Housing Society, F. R. S. Yorke [F], E. Rosenberg and C. S. Mardall [A]. Right: Little Walden, Saffron Walden B. C., Mauger and May [FF]

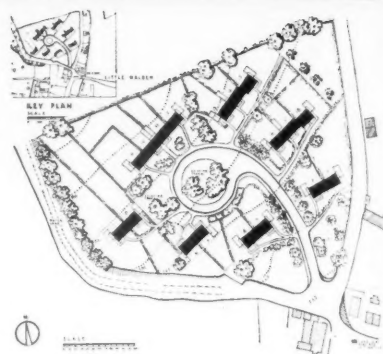
country they must be given really good houses. His farmer friends told him that often when interviewing a new man the first question was not: 'What are the wages?' but 'Can I see the cottage?'

As Mr. Jellicoe had said, the local and county authorities were taking the place of the landowners of the past, who, with their farmers and foresters, made the pattern of rural England as we knew it. A very grave responsibility rested upon those authorities, and on their architects and planners. We were embarking on what was perhaps the largest building programme ever contemplated, and what we did now and how we did it would decide whether generations to come would curse or bless us. It was within the power of local authorities to give that old term of reproach, 'It looks like a council house,' a new and opposite meaning. We must see to it that the houses we built were not only sound but seemly, good-mannered new members of the communities which they joined.

On the question of village planning a study might well be made of some of the more compact old villages, which were excellent examples of what today would be called good neighbourhood units, where all sorts and conditions of men lived and worked side by side, with no segregation. Mainly owing to the difficulty of site acquisition, there was a tendency to build houses outside the village proper, but the golden rule for short-term policy was first to fill in the gaps.

He agreed with Mr. Jellicoe about ceiling heights; he and others had been fighting that regulation all their lives. Putting it at its lowest, the saving of money which would be effected was important.

Mr. Paul V. E. Mauger, M.T.P.I. [F], suggested that the architect *qua* country planner must come into the picture before the architect *qua* organizer and designer of buildings, because only in that way could he have some share in the selection of sites and be blamed by his authority if there was



a wrong decision; and nothing was so embarrassing to a council as not to know who had let them down. If he came in at the outset he would consider such questions as efficient drainage, and he might be the only man in the committee room who had thought of some of the other factors to which Mr. Jellicoe had referred—the functional nature of the agricultural landscape, the need for trees to provide shelter from wind and shade for cattle, the avoidance of valley sites not only because they might be liable to floods but because they might be more suitable for meadows or playing-fields.

In looking at matters from that point of view very great support was received from the Ministry of Town and Country Planning, but to deal with the agricultural problem was always difficult, because another Ministry whose views were very important on these matters was involved. A proper sense of obligation to the countryside was essential when selecting rural sites. The choice of sites was often perplexing, because one looked for the best site and not necessarily for the cheapest. On boulder clay soil, for instance, on which he had had most of his experience, often the village, being on rising ground to avoid floods, had used up all the available flat land, and one was left with a rather expensive sloping site to deal with, and it was difficult to turn down a farmer's offer of a much more economical flat site away from the village. In that case it was necessary to recall that the village was a community, and to think of the need for

the women getting conveniently to the shop and the children to the school, so that a site in the village was to be preferred to a flatter and more economical one outside. Fortunately, the Ministry would support that point of view.

Even in the village what might appear to be an ideal site might be open to the objection that it was first-rate grazing land or that to build houses there would block the view of the church from certain older houses. It was not possible to lay down hard and fast rules. Another source of difficulty in finding sites came from the laying down, on regional planning maps, of by-pass roads round villages, which were apt to be treated most solemnly by the routine town planner.

It might seem almost self-evident to town-dwellers that the garden should serve as an extension of the house, but when a group of Women's Institute representatives were consulted it was found that they did not want a glazed door from the living-room into the garden. They said they did not want mud brought into the house, but it probably went deeper than that; it was an expression of their resistance to becoming bees. The land was where they worked, and they wanted to be enclosed and protected from it, so that in the country the house was liable to be more enclosed from its garden, which was associated with labour, than it would be in a suburb.

There were other differences between rural and urban houses. An open fire was preferred, but the closeable type should not be dismissed too readily; there was a combined closeable fire with convection flues which was quite suitable. The ground floor w.c. should be near the kitchen entrance, for people working in the garden.

The front garden presented difficulty, but if an open space was developed on the lines of a village green, that was a pattern with which everybody was familiar, and it would be possible to get away with it.

Mr. Anthony Pott [A] called attention to the importance of the roof in rural housing, and remarked that the simplest way of wrecking about quarter of a county of fine landscape was to use unsuitable roofing material. He had seen temporary schemes which would have been quite inconspicuous but for the wrong use of roofing materials.

Mr. A. Bragg [A] suggested that another omission from the paper was that no consideration had been given to drainage in rural areas, which was probably the most difficult problem in the consideration of site selection and layout. In his own area, he said, there were about 15 sites, of which seven were impossible to drain, and if the sites had been selected in the first place with proper regard to drainage the whole of the village redevelopment might have been different.

Very little research was being done on the life and habits of the rural worker and others who lived in agricultural areas, and a great deal of work was required there. Country people were very conservative, and wanted a small room, which so many architects and planners did not provide, where they could entertain and where they could keep their best furniture.

The Chairman, in proposing a vote of thanks to the author, said that he would like to live in a cottage with 7 ft. 6 in. rooms designed by Mr. Jellicoe, with a walled garden and a rent of 7s. 6d. a week. He himself had got away with more than a hundred houses at Welwyn Garden City

with 7 ft. 6 in. rooms before his brother, who was the engineer, had been able to get any bye-laws made.

Mr. Jellicoe, in reply, said he did not claim even to have touched the fringe of the subject; he could spend a whole afternoon discussing the second or third bedroom. He agreed with Mr. Pott that roofs were important. In hot countries the aim was to have light roofs to send back the heat of the sun, but in this country the tendency was to use materials which absorbed the heat, because one designed for winter conditions. That meant generally colours of fairly low tone. The white roofs of the temporary bungalows were contrary to that. Gable ends were in his view much nicer than sloped roofs; aesthetically they were certainly better, and he thought it was possible to show that they had practical advantages.

He had mentioned drainage as one of the first considerations; if a house was put on a spot where drainage was difficult it would not be easy aesthetically to make it seem nice. The investigation of rural social conditions was a vast subject. The motor bicycle had made a great difference, and the whole outlook of the village was completely changing. People were not so content as their fathers were with their immediate surroundings. The subject really deserved a conference to itself.

Part II of the Conference, consisting of an Address by the Right Hon. Lewis Silkin, M.P., Minister of Town and Country Planning, 'Three Dimensional Aspects of Housing Layout' by Mr. Frederick Gibberd [F], 'Neighbourhood Planning in New Areas, by Miss J. G. Ledeboer [A], and 'Neighbourhood Planning in Built-up Areas' by Mr. R. H. Matthew [A] will be published in the August JOURNAL.

Questions and Answers in Practice

By Charles Woodward [A] and Sydney Redfern, LL.B.

At a General Meeting of the Royal Institute of British Architects, 22 June 1948

The President in the Chair

The Secretary read the report of the scrutineers on the result of the Annual Election for the Council for the session 1948-49, and the President declared those members duly elected.

The President: I am sure you would wish me to propose a vote of thanks to the scrutineers for their labours. How anybody can volunteer for the job of scrutineer completely baffles me, because I have such a horror of figures, and to be saturated by figures as they must have been day after day, hour after hour, is something for which they should be commended.

Mr. C. J. Epril [F], responding on behalf of the scrutineers, said: I rise with very much pleasure to thank you on behalf of my colleagues for the very kind tribute you, sir, have paid to us, and to you, ladies and gentlemen, for the way in which you

received it. I cannot sit down without thanking the Secretary and his staff for the manner in which they simplified things, and also for the way in which they looked after our personal comfort.

The President: Mr. Woodward and Mr. Redfern have very kindly agreed to answer questions on Practice. Advance notice of some questions has been given I understand, and I will ask Mr. Woodward and Mr. Redfern to deal with those first. After that, if there is sufficient time left, you can fire as many questions at them as you like.

Mr. Woodward: The first question concerns the position when a contractor becomes bankrupt, and the materials on the site have been paid for, and therefore pass into the possession of the building owner.

I must shortly explain this case. It was a case of a local authority employing a

builder under the R.I.B.A. contract. The materials had been certified by the architect and paid for by the council, and those materials consisted of some on the site and some in the builder's yard. The trustee in bankruptcy claimed possession of those materials under a provision of the Bankruptcy Act, and the local council then instituted legal proceedings in the County Court challenging that decision. The County Court Judge upheld the trustee, and he said that the materials on the site and in the builder's yard were the property of the trustee in bankruptcy. The council then appealed to the High Court, a Divisional Court in the Chancery Division, and the Chancery Judges confirmed the decision so far as it related to the materials in the builder's yard. That court said that the materials belonged to the trustee in bank-

ruptcy, but as regards the materials on the site of the works, they said those belonged to the local council, and at the moment that is the position. If an architect has included in his certificate materials on the site of the works, and if the builder unfortunately becomes bankrupt, those materials still belong to the employer.

Having read the judgement in that case, I thought it might be as well to read the clause in the R.I.B.A. contract under which this decision was given. Shortly that clause is as follows: 'Where in any certificate for which the contractor has received payment the architect has in accordance with Clause 24 (b) of these conditions included the value of any unfixed materials and goods intended for and placed on or adjacent to the works, then such materials shall be the property of the employer.' When I was reading that clause I was struck by the word 'adjacent', and I decided to try and find some legal interpretation of that word. I was successful. This was the interpretation of the Court: 'Adjacent is not a word to which a precise and uniform meaning is usually attached. It is not confined to places adjoining, and it includes places close to or near, its application being entirely a question of circumstances!' Having read that, I shall now ask Mr. Redfern how far away materials must be before they cease to be adjacent!

Mr. Redfern: I have nothing to add to that masterly definition of the word 'adjacent', but I would certainly advise an architect never to include in his certificate the cost of materials which are not actually on the site.

Mr. Woodward: The second question concerns quite a different subject. An evergreen tree growing on the site of one owner, in the course of some 75 years, grows to such a size that the amount of light reaching windows of a building on an adjoining site is appreciably reduced, but the owner has never complained to the adjoining owner on whose site the tree is growing. The question is, does the obstruction of light by the tree extinguish the injured owners' right of light and, if so, is the extinction of light a continually increasing one due to the constantly increasing size of the tree? For instance, would the injured owner be entitled at any time to ask for the tree to be lopped back to its dimensions of 19 years and one day previous? Has the injured owner any remedy if the removal of the tree in whole or in part is prevented by statute—for example, the Town and Country Planning Act?

As a purely lay opinion and subject to correction, I should have thought that the tree must be lopped back sufficiently far to allow sufficient light for the ordinary purposes of that particular building. I do not know what would happen if the owner of the tree refused to allow any lopping. That is a problem with which Mr. Redfern might deal.

Mr. Redfern: An injunction might be obtained or damages. Courts lean to damages rather than injunctions, but I think probably they would grant an injunction if damages would not really compensate the dominant owner.

Of course, the Town and Country Planning Act might alter the position, although I do not think the regulations about trees have yet been published. I do not think the Town and Country Planning Act regulations will stop trees being lopped, although Heaven knows what the Town and Country Planning Act can or will do!

The Hon. Secretary: Might I ask in the event of that tree being a cedar tree how he would lop it?

Mr. Woodward: I might be considered to be an architect, but I am afraid I am not a gardener!

The next question concerns P.C. and provisional sums in the contract. Where the general conditions of the specification or bill of quantities does not make any special provision for the treatment of P.C. or provisional sums in the settlement of accounts, if any such sums are ordered and paid for direct by the employers, is the contractor entitled to be paid his profit as shown in his pricing on such P.C., or provisional sum, in the settlement of accounts when such sum has been paid direct?

That question necessitates defining what is meant by the word 'omission' and the power to omit which is provided for in the contract. There again it struck me that I might get a definition from some decided case of the word 'omission', and I found a case where a building contract gave power to the owner to order omissions without in any way affecting or making void the contract, but that there should be a deduction from the amount of the contract by a fair and reasonable valuation. It was held that the word 'omission' contemplated things left out of the contract, but not such as were taken out of the contract and given to another contractor.

Therefore, the answer to this question is that if the building owner deals with provisional sums direct, he must then pay the loss of profit to the contractor on the footing that the contractor is entitled to carry out the whole of the work in the contract, if it is in fact carried out. It is quite another thing when you omit work which is not to be executed, and I think that is the meaning of that particular judgement. I have said that I thought he was entitled to loss of profit, but, of course, there is the cash discount on P.C. items and provisional sums, and there I shall have to leave Mr. Redfern to explain what the position might be.

So far as loss of profit is concerned, I think when the building owner deals direct with these sums he must pay the loss of profit to the contractor.

Mr. Redfern: I agree with what Mr. Woodward has said about work on the job, but the cash discount, in my opinion, is not a part of the loss of profit. The builder possibly in order to advance the job has to borrow money from his bank, and the cash discounts which he gets reimburse him to some extent for that. They minimize his loss. From the legal point of view, my view is that cash discount is not part of a builder's profit.

Mr. Woodward: The next point concerns the question of fire insurance under the

R.I.B.A. form of contract. As you will remember, it is provided that in the case of a new building a policy has to be taken out for the full value of the work in the joint names of the employer and the contractor. If, during the progress of the work, the building is damaged by fire and then the builder goes bankrupt, what happens to the money due under the policy? The actual question is could the trustee in bankruptcy make a claim that the policy money was his property?

My own view about it is that the trustee could, if he liked, elect to go on with the contract. If he does not elect to go on with the contract, then my view is that the employer would employ another contractor and use the insurance money to reinstate the building, and the trustee would have no claim at all on the money due under the policy.

Then the question which arises out of this is, if the policy is in the joint names of the employer and the contractor, how does one really get hold of the money? It is provided that the money is payable to the contractor on the certificate of the architect, but the contract is not quite clear as to how one gets the money out of the insurance company, and perhaps Mr. Redfern will be able to help us in that connection.

Mr. Redfern: The insurance company will, of course, insist upon getting a receipt from the two policy holders, and they will refuse to part with it without that receipt. If two policy holders are quarrelling among themselves as regards the true ownership of the money, then they can litigate about it, and the insurance company will, of course, comply with any order the court may make. If the court declares that in the circumstances the money belongs to the building owner, then the insurance company will comply with that order and pay the building owner.

Mr. Woodward: The second question on the same point of insurance concerns existing building. It is suggested that the fact that workmen are engaged on the premises might jeopardise the employer's insurance on the old building, but I should not have thought that would happen, because there would be no doubt an existing policy on the old building. I think the architect would also advise the employer to notify the insurance company that there were workmen on the premises, and the company might, if it wished, make a claim for an additional premium. Therefore, I should not have thought that this point would have arisen.

It did strike me in reading this question that in addition to insuring the building—the actual bricks and mortar—from damage by fire, if there happened to be any contents in the building, it would be wise to recommend the building owner to insure the contents, because there may be circumstances where the workmen are only in a portion of the house and furniture is perhaps locked up in other rooms where the workmen will not go, but there is a fire. If those contents are not specifically insured, and the company notified that workmen

are on the premises, it might lead to some difficulty.

The next question concerns the code of professional practice of the R.I.B.A. A chartered architect is employed as an architectural assistant by a firm of surveyors—which firm does not practise as architects. His employers are commissioned to carry out alterations and reconstruction works for a client who has hitherto employed another chartered architect for the work; but as he, the client, was not satisfied with this architect, he terminated his engagement and then instructed the firm of surveyors to carry on and complete the work which originally the architect was to have done. The architect employed by the surveyors as an assistant is instructed by his employers to deal with the job, but subsequently learns that his firm have not informed the architect who in the first instance was commissioned for the work, that they are now acting for the client. The question is: Is it incumbent upon the architect employed by the surveyors as an assistant and working on the particular job, to comply with the R.I.B.A. and A.R.C.U.K. codes of practice by informing the previously engaged architect of his firm's employment by the client?

My general reaction to that was that all members of the Institute should comply with the code, and in whatever circumstances they may be employed upon work upon which another architect has been employed, that they should comply with the code which states: 'An architect on being approached to proceed with professional work upon which another architect was previously employed, shall notify the fact to such architect.'

Mr. Redfern does not agree with my reading of the Code of Professional Practice, therefore I shall ask him to tell you what his view about this particular case is in these particular circumstances.

Mr. Redfern: The people who are approached with a view to carrying on this work are not, we are told, members of the R.I.B.A., so how this architectural assistant comes to be employed in that particular capacity, I do not know, unless the surveyors have a special architectural department. In any case, he is never approached. It is the surveyor who is approached, and it is the surveyor who takes the fees and the responsibility for the job. Therefore, I feel personally that if that came in the form of a complaint to the Professional Conduct Committee of the R.I.B.A., they would require a lot more information before they answered that question or dealt with it. They would want to know precisely what this architectural assistant's position is. We are told he is merely an assistant and is detailed for a job, and the surveyors are not members of the R.I.B.A. and cannot be bound by any Code, unless possibly they have one of their own.

Mr. Woodward: The same architect asks another question. Two houses are destroyed by enemy action, and the boundaries between them are to a great extent obliterated. There are, however, the remains of fence posts which might delineate the

division between the properties, but the architect, acting for one of the owners—basing his contention on a dimension which he has scaled off an accurate tracing of an undimensioned deed plan, the scale of which is 88 ft. to the in.—claims that they encroach on to his client's land some 3 in. The question is, is there any means other than litigation of proving which of the two architects is correct?

I think the short answer is no, but I will ask Mr. Redfern to state his opinion.

Mr. Redfern: I am glad to say that the answer is no!

Mr. Woodward: The next question is as follows: An architect is responsible for the erection of a new high building adjoining an old low building in different ownership. In spite of all reasonable precautions in erecting the new building, serious cracks occur in the old building. It is agreed that these cracks result from the erection of the new building; the contractor refuses to accept responsibility, as the new foundations were carried out in accordance with instructions from a reputable structural engineer, and under the supervision of a clerk of works. The building owner therefore has to pay considerable damages. In preparing the contract, what precautions should or could the architect have taken to save the building owner from liability?

The only provision in the R.I.B.A. contract regarding this particular point, that is, injury to property, does not, of course, really touch the point at all, because the insurance clause in the contract merely provides that the contractor shall be liable for and indemnify the employer against any loss, claim or proceedings in respect of any injury to adjoining property, providing always that the same is due to any negligence, omission or default of the contractor. That is indemnification against contractor's negligence, but as this question is framed there is no negligence suggested, and it looks as if the damage to the old building is inevitable. Therefore, it does become necessary to consult Mr. Redfern on the question of how, in those circumstances, you can protect your client from the liability which would fall upon him to make good any cracks in the adjoining old building.

Mr. Redfern: I can only suggest that you get a Lloyd's underwriter and take him out to dinner. He might then underwrite the risk; but the fact that the damage is inevitable is quite irrelevant, because people cannot go about doing damage—in fact they must not do things when damage to other persons' property inevitably follows. The building owner must, of course, include that as part of his cost of building. He wants his building there, and he has naturally to abstain from interfering with anybody's else's property. If he does not, then he must pay. He may be able to insure against it, but I should think it would be very difficult.

Mr. Woodward: Does that mean that in some circumstances he might never be able to build?

Mr. Redfern: I should think quite possibly, yes.

A Questioner: Surely the architect should advise his clients that there are those risks before the building begins?

Mr. Redfern: I agree. We are told that a competent structural engineer was engaged, and it seems possible that he might also be soaked for something!

A Questioner: If it were in the London area the London Building Act would offer some protection in the shape of a party wall notice.

Mr. Woodward: There is nothing here about a party wall. It is simply a high building adjoining an old building in different ownerships.

The next question concerns the War Damage Commission. The architect concerned states: 'In each of the under-mentioned cases the War Damage Commission are the third party responsible for making payments, a course of action cannot therefore be determined solely by the client and his architect.' That is rather a peculiar statement. When one talks about the War Damage Commission being third parties, of course they are not in any sense a third party to the contract between the claimant and the builder who is repairing war damage. However, perhaps that does not matter.

The problem is that a contractor, after due notice, fails to complete. He is in financial difficulties, but not bankrupt. Payments have been made in proper proportions for the work executed to date, but owing to rises in costs and original low price and subsequent deterioration it is now impossible to complete for the original cost. The question is: What is the proper course of action, and can the War Damage Commission be called upon to meet the extra charge?

I think the answer is that if additional costs are due to rise in materials and wages, and there is no rise or fall clause in the contract whereby there would be no obligation on the building owner to pay those extra costs, the War Damage Commission would not meet that extra cost. I think that if the contract provides for rise and fall, and the builder has to be reimbursed by the building owner for this extra cost, then the Commission would reimburse the building owner for that extra cost.

The second problem is this. A house, one of a terrace, is being reinstated. The party walls have no damp courses, and the local authorities call for the insertion of the same. The War Damage Commission will only meet the cost of the reinstating to the original condition, and the client cannot meet any extras. The question is: Can the local authority insist and, if so, is the War Damage Commission obliged to meet the cost of an item which becomes essential?

The position is that when you rebuild you must comply with the bye-laws and building legislation, but the Commission, under the War Damage Act, can only pay for identical reinstatement. They cannot pay for anything which may be required in complying with the bye-laws. Therefore, the short answer is that the damp courses would have to be inserted, but they could

not be claimed from the War Damage Commission. If the unfortunate owner was unable to meet that cost I do not know what the position would be.

Mr. Redfern: He could raise a mortgage.

Mr. Woodward: The third question on the same subject is as follows: A contractor fails after repeated efforts and extensive lapse of time to deal with the accounts.—I presume by that it is meant that the contractor does not send in his account within a reasonable time.—Is it unwise to make a final payment without agreement as, in the event of a dispute, the War Damage Commission would be unlikely to meet any further charges which might appear, subsequently, to be reasonable?

I am not sure that I understand exactly what the question means, but I rather imagine that no architect would advise his client to make any final payment to the builder until he was sure that the War Damage Commission was going to agree that payment. I think that would be the position. He would always have some money in hand, and if the builder was late in rendering his account that would be his own fault. I think the answer to the question is that no architect would certify a final payment to the contractor unless he had approval of that final figure from the War Damage Commission.

Mr. Redfern: I agree with that entirely.

Mr. Woodward: The next question is as follows: An architect, acting on proper written instructions from his client, prepared drawings, instructed a quantity surveyor to prepare a bill of quantities, and obtained estimates for carrying out the work concerned. Again, acting on written instructions, he arranged for the builder who had submitted the lowest estimate to carry out certain preliminary work prior to the signing of the contract. The builder carried out these instructions, but before the arrangement for signing the contract were complete, the employer sold his interest in the property concerned, and the new owner appointed another architect and quantity surveyor, and engaged another builder. The original architect forwarded the contractor's certified account for the work done to his client, who repudiated payment. The parties are not disposed to go to arbitration. The contractor asked whether there was an implied contract between him and the original building owner, or whether he should look for payment to the architect who gave him his instructions, leaving it to the architect to recover the expense from his client.

On the facts stated, the architect, as agent for his client, had authority to order this particular work, and I think the answer is that the architect should tell the builder to look to his client for payment of that particular work. What the architect did in that case he had authority to do, and he was acting as an agent, which seems to be the answer. He would not, in those circumstances be held liable for what the builder has done.

Mr. Redfern: I would only add that any architect who gives legal advice to a contractor or anybody else is just as foolish

as a lawyer who gives architectural advice to a client!

Mr. Woodward: The next question is: What is the correct procedure for an architect to bring about a settlement of his account if the client is reluctant to make a payment after a project has been abandoned?

The usual procedure is a pressing letter, and if no result, a solicitor's letter, and if no result the issue of a writ, providing your solicitor says there cannot possibly be a counter claim for negligence. As I understand it, if a writ for fees is issued and the client puts in a counter claim for damages for negligence, I cannot then say, 'Oh, I have finished with this. We will pack up'. I believe if I say that, the solicitor may then say, 'Oh, no; if you want to pack up you will have to pay the damages claimed under the counter claim for negligence.' I should like to know if that is the correct position.

Mr. Redfern: That is not exactly the position. In any case, how can any lawyer at that stage of the proceedings tell his architect client that there is no possibility of a claim for negligence against him? There is always the possibility of a claim for negligence against any professional man who wants to be paid.

The second point is that the architect must, even if there is a claim, be entitled to credit for his fees, because a claim for negligence is based on the fact that he is employed and paid to do the job properly. Therefore, the position is not precisely as you have suggested. It would, as a matter of fact, be a question of careful and tricky negotiation.

Mr. Woodward: The next question again concerns the Code of Professional Practice. An architect in private practice carries out the first stage of the rebuilding of a 'voluntary' school. Before the second stage can be started, however, the status of the school changes to that of a County school, and the local education authority instruct their own architect to proceed with the extensions. The question is: Is the authority's architect under an obligation to communicate with the private architect in accordance with paragraph 5 of the Code of Professional Practice?

My answer to that would be yes. I think that if the official architect is a member of the R.I.B.A. he would quite naturally comply with the Code, and he would simply give notice that he was being employed on work upon which the other architect had previously been employed. After all, there is no harm in complying with this particular clause, because all he has to do is to notify the previous architect that he is being employed. I do not see why any member of the Institute, whatever status he may have, should ever hesitate, if he is employed in such circumstances, about giving the usual notice under the code to the private architect. I am not sure whether Mr. Redfern quite agrees with my interpretation of the code.

Mr. Redfern: I agree that any architect out of caution would give an intimation, because there is no trouble about doing it.

Supposing, however, he forgot and was then hauled up before the Professional Conduct Committee. Could that Committee impose a penalty on him? I rather doubt it. I feel it is linked up with Clause 4, and I think it means an architect being approached to proceed with professional work for the same client. That is, I think, the spirit of the thing. Here is a change of ownership and a change of client, and I have grave doubts as to whether the R.I.B.A. would be legally entitled to impose a penalty upon the county architect in that particular case.

Mr. Woodward: The second question arising out of that is this: Could the change of ownership of the school be regarded as terminating the first architect's connection with it?

I should have thought the answer was yes. On any change of ownership the scheme is abandoned so far as the first architect is concerned.

The next point raised is as follows: Has any progress been made towards amending the regulation under which an architect is automatically guilty of an offence if the amount authorized under a building licence is exceeded, or if work is done—even against his instructions—not covered by the licence?

No progress has been made because I do not think it is necessary to make any. As I understand it, it is always open to everybody, on being charged with an offence, to plead not guilty. If, unfortunately, an architect is charged with exceeding the amount of the building licence, he can plead not guilty and make good at the trial, if he can. Therefore, the answer is that no progress has been made to amend the regulations, because it did not appear to the powers that be that there was any necessity to amend them when it is open to anybody to plead not guilty if charged. **Mr. Redfern:** If an architect can prove—and the onus of proof is upon him—that he knew nothing whatever about it, and had no reason to know about the breach of regulations, he would, in my opinion, be found not guilty. It is not automatic.

Mr. Woodward: The last question is: Can any ruling be given on what degree of resemblance between two architects' designs would be necessary to support an action for breach of copyright?

My first reaction to that is this. In any action for breach of copyright, the question of what is artistic merit arises, and the tribunal who judge whether or not there is an infringement of copyright have to decide whether or not there is artistic merit in the design. I am not sure at all what the reactions of an ultra modern design today would be on a judge of the High Court. If he arrived at the conclusion that there was no artistic merit in the design, then, of course, there would be no infringement but it is, as I understand it, purely a matter of opinion of the High Court judge.

Mr. Redfern: I think the unfortunate judge has to decide with the assistance no doubt of expert architect witnesses and other artists on both sides. Each case would be decided on its demerits I should think!

A Questioner: I should like to raise a point in regard to the operation of Clause 25 of the R.I.B.A. Form of Contract. This concerns the form of contract where quantities do not form part of it, tenders have been invited, and the ordinary ruling prices are taken as a basis. After a lapse of a month, a contractor asks for the documents to peruse, in his detailed estimate he does not state the rates upon which his estimate was based, but he asks for the documents to peruse prior to signing them, and three days afterwards he signs them. There is no mention at all of increases between the date of the tender so submitted and the date of signing, and in fact there is no mention at all about increases until a year afterwards. The job was to be finished in six months, but due to scarcity of materials and labour it was carried on much longer. At the end of the year the contractor made an application for an increase, but the architect sent a reply saying that it was rather surprising that he had not complied with Clause 25A in giving notice.

Two or three months elapsed, and then the contractor wrote to apologize, stating that in another week he would have the necessary particulars. The architect was still in doubt as to what he had in his mind. Then at the end of a period of months from the date of signing of the contract the contractor sent in a statement showing that the increase took place between the date of the lodgment of the tender and the signing of the contract. He gave no notice whatever under that clause, and the point is after a lapse of time is he entitled to make a claim, not having given notice?

Mr. Woodward: The rates in the builder's tender are the rates which exist at the date the tender is delivered, and the fact that the contract was not signed until a month afterwards would not make any difference. If those rates go up in accordance with the National Joint Council rules after the date of the tender, then the contractor is entitled to the rise.

With regard to the materials, he ought at the time of sending in his tender to have attached a list of the basic prices of the materials upon which the tender is based. That document is important because if there is any rise in the cost of materials you must have a basic price on which to calculate the rise.

As to whether the contractor is estopped from making any claim for this rise because he has not given notice, that is a matter which I shall refer to Mr. Redfern. Before doing so, however, I would point out that the clause provides that a contractor shall, within a reasonable time, give written notice to the architect of any fluctuations taking place.

It is apparently a question of what is a reasonable time, and I do not exactly know what the construction of the paragraph would be. I should have thought that if the contractor did not give notice it would not have prevented him from making a claim for any rise which took place after the date of the tender.

Mr. Redfern: The employer has not suffered in any way, and the architect

probably knows as much about the rise in cost as the builder.

A Questioner: In the case where the builder had gone bankrupt, Mr. Woodward read the clause in the contract and selected the word 'adjacent' as having particular importance. Surely the word 'intended' has also particular significance? I am thinking particularly of joinery which is being executed in the builder's yard, and which would not necessarily be on the site at the time when the contractor went bankrupt. What would be the interpretation of the word 'intended'?

Mr. Woodward: If the joinery is in the builder's workshop, then, according to this judgement, it would belong to the trustee, even though it had been paid for, because it is not on the site.

Mr. Redfern: The point is you cannot contract out of the Bankruptcy Act, and while the clause in the R.I.B.A. contract may be of assistance, the object of this apparent possession clause is to stop a builder, or anybody else, having a yard full of material which induces, or which may induce, people to give him credit. If the yard is full of material which has been paid for and which belongs to somebody else, then the person who has paid for it should take care to shift it so that the builder cannot get credit by displaying a full shop window of other people's goods.

A Questioner: An architect prepares plans for a building owner who then proceeds to build without having received a licence. Can any action be taken against the architect?

Mr. Woodward: Has the architect been a party to the procedure by which the builder gets on with the work without a licence?

The Questioner: The case I am thinking of is where the owner is also a builder and there is no contract.

Mr. Woodward: In that case he obtains the plans from the architect and either does or does not pay the architect's fee. In such a case the architect is no party to the proceedings.

A Speaker: Mr. Redfern spoke about the lawyer giving advice on architectural matters. I was asked to get out plans for a house. The client said that her solicitor had told her that the architect's fee in that case would be 15 guineas. In justice to the legal profession I did not believe the client and refused the commission.

A Questioner: In connection with the rebuilding of war-damaged houses in the London area, would it be necessary to serve a party wall notice?

Mr. Woodward: In the London area I think it would be necessary. You must remember, however, that the War Damage Commission will not pay surveyor's fees in connection with party walls. I think strictly it would be necessary to serve party wall notices for the purpose of rebuilding.

A Questioner: If a contractor has not filled in every price for all materials in the schedule for basic materials forming part of a tender, is he or is he not entitled to the rise or fall in cost of those particular items as distinct from those which are included

in the schedule, assuming that there is a rise and fall clause in the specification itself?

Mr. Woodward: I think that if he could prove that there had been a rise in certain materials, even though he had not stated it in the basic prices, he would be entitled to the rise, although, of course, strictly speaking, the basic prices are one of the contract documents and if the material is not mentioned in that basic price it might be that the builder did not care one way or the other.

A Questioner: I recently had experience of several contractors who did not include items in their basic prices, timber and lead being the primary ones. I referred the matter to the Ministry of Health, and their reply was most definite that it could not be allowed as every builder is supposed to know that when a contract is signed.

Mr. Woodward: The Ministries think in a rather different way!

A Speaker: We had a similar case to that, and legal advice was taken on the matter. We put it up to the client and he paid.

A Questioner: Is it true that planking and strutting has to be paid for whether it is carried out or not in foundation work?

Mr. Woodward: It is a provision in a contract that a contractor will carry out planking and strutting, but he is not obliged to carry it out. I do not think you would make a deduction from his price because he did not, in the circumstances, have to carry out planking and strutting. It is his risk. You give him the opportunity to price the item and he takes the risk. If he does not have to carry it out so much the better for him.

VOTE OF THANKS

The President: It is 'adjacent' to half-past seven, and if there are no more questions I think you would like me to move a very hearty vote of thanks to Mr. Woodward and Mr. Redfern for the excellent way in which they have dealt with these questions. Some disgruntled people say 'What does the R.I.B.A. do for us?' I have sat here tonight and have seen the interest on the faces of people as questions have been answered, and have heard the questions put, and I think the R.I.B.A. has done a good deal for a number of architects tonight. It has, in my opinion, been a very interesting evening very well spent. Whether there ought to be more of them, I leave to Mr. Woodward and Mr. Redfern.

It is a very interesting way of spending one and a half hours, and I will move from the chair that a very hearty vote of thanks be accorded to Mr. Woodward and Mr. Redfern.

Mr. Woodward: Thank you very much. So far as I am personally concerned, it has been a pleasure to endeavour to answer these questions. Whether or not they will be of any assistance to you, remains to be proved.

Mr. Redfern: I, too, thank you very much. I have not had as much reason as usual to differ from my friend Mr. Woodward, and that is an additional pleasure.

Models in the Olympic Games

Fine Arts Competitions



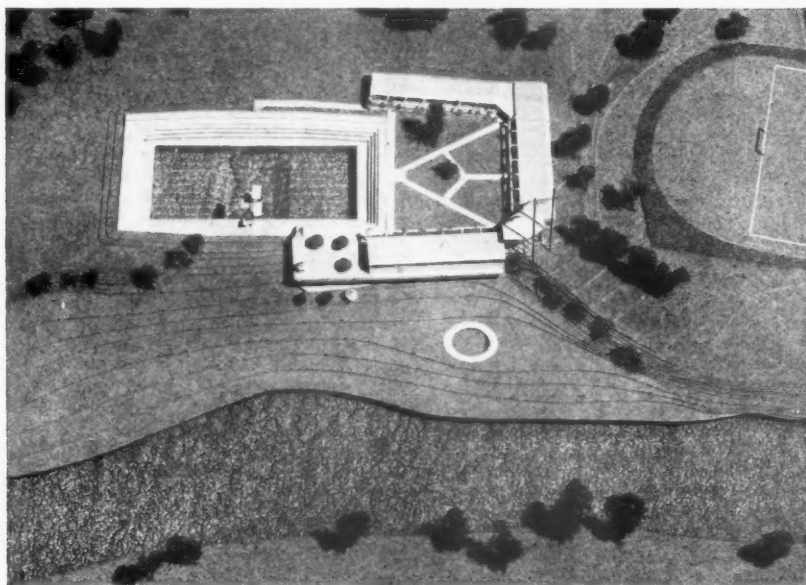
Skisprungschanze auf dem Kobenzl by Adolf Hoch (Austria); the design placed first in the Architectural Designs section. The model shows the design under snow. The seating and substructure of the ski run are of reinforced concrete

The photographs on these pages are of some of the models submitted in the Architecture competitions in connection with the Olympic Games. There were two sections, one a town planning subject and one an architectural subject, both connected with sport and physical training. The jury consisted of Sir Percy Thomas [F], Mr. Robert Matthew [A], Professor W. G. Holford [A], Mr. Jan Wills (Holland), and Mr. Howard Crane (United States of America).

It is not our practice to illustrate architectural competitions as such, and these photographs are reproduced chiefly as outstanding examples of architectural model making, but also as a comparison of how architects of different countries approach the same design subject. Though competitors were asked to submit their designs in model form if possible, several submitted drawings either instead of or in addition to models. All are on view at the Victoria and Albert Museum until 14 August, Mondays, Tuesdays and Fridays 10 a.m. to 6 p.m., Wednesdays and Saturdays 10 a.m. to 10 p.m., Sundays 2.30 p.m. to 6 p.m. The exhibition, which is entitled "Sport in Art", includes sections on Painting and Graphic Art, Sculpture, Literature and Music.

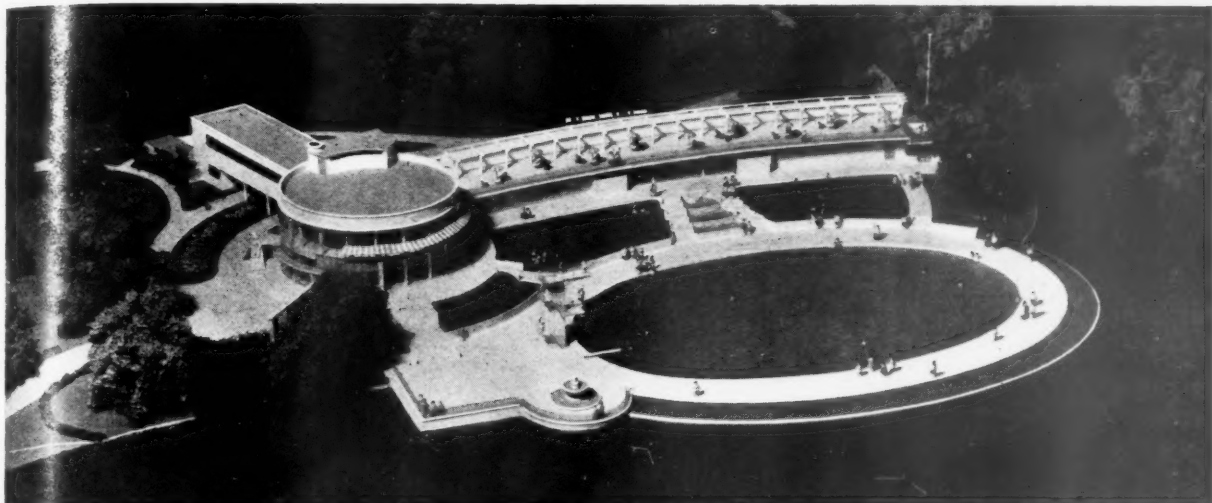


Two views of a model of a swimming pool and ancillary buildings at Upsala, Sweden, by Sture Frölen

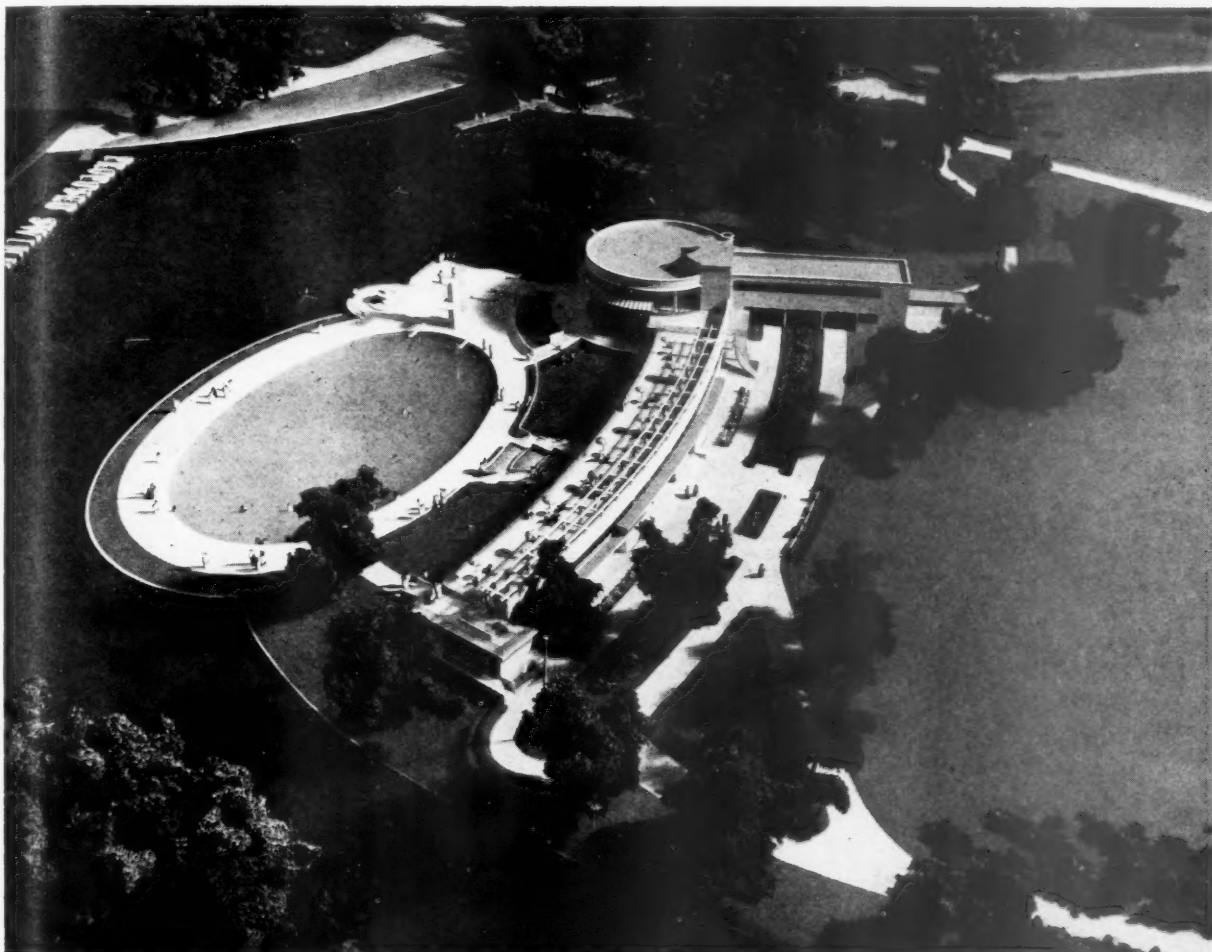


We include on the opposite page two photographs of the model of the proposed lido or swimming pool in Regent's Park, which, although not submitted in the competitions, is included in the exhibition at the Victoria and Albert Museum. We reproduce another view of it on the cover. The pool can be used by about 300 persons, exclusive of spectators. Though elliptical in shape, it can easily be adapted for international water sports by temporary barriers to give the required arc for water races of 165 ft. by 60 ft. The cafeteria on the first floor of the circular building is planned to provide main meals for more than 200 persons at a time as well as snacks and main meals on the ground floor. The design is by a group of Ministry of Works' architects headed by Mr. C. Terry Pledge [A].

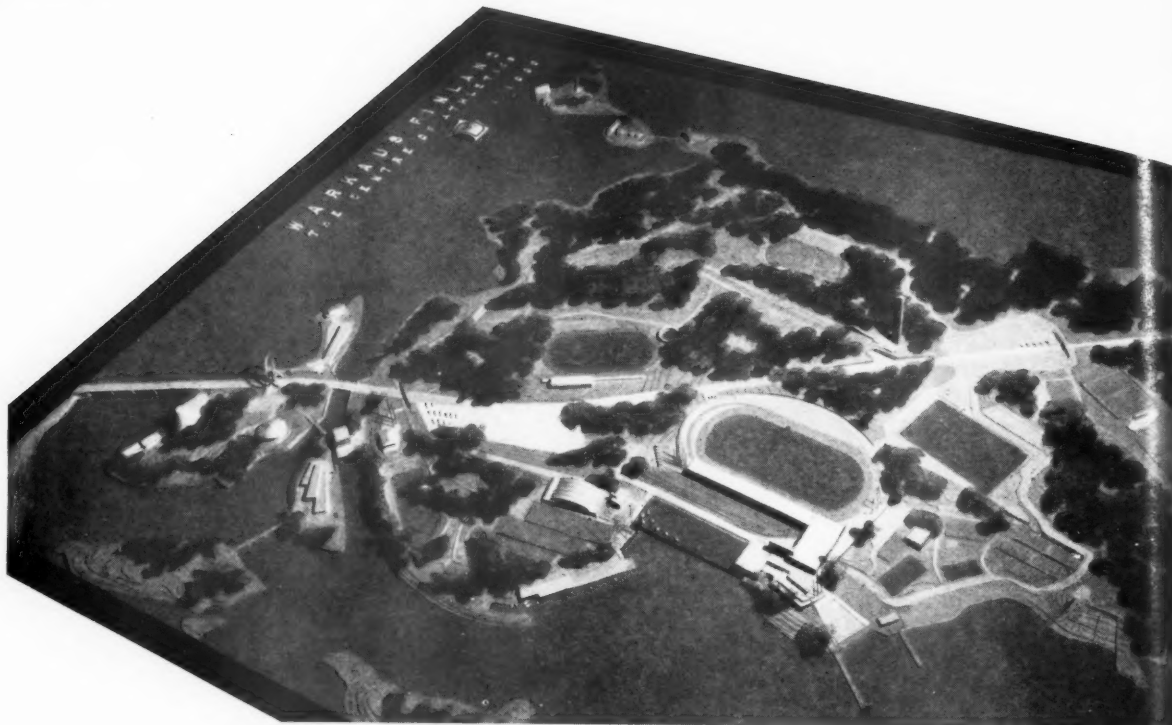
The site of the lido is a well-wooded promontory between the two northern arms of the Regent's Park lake. The main aspect is south-west which will give the maximum sun in the afternoon when the pool is expected to be most used. As many trees as possible are to be retained to form a background.



The swimming pool is to be built into the edge of the Regent's Park lake, which is shown in the foreground. The terrace and lawns are for sunbathing, and there is a cascade on the short axis. The pool will accommodate 300 persons, exclusive of spectators



The proposed swimming pool and cafeteria in Regent's Park, London, by a group of Ministry of Works' architects under Mr. C. Terry Pledge [4]. The cafeteria (first floor) and snack bar (ground floor) are in the circular building. The curved building houses the changing rooms

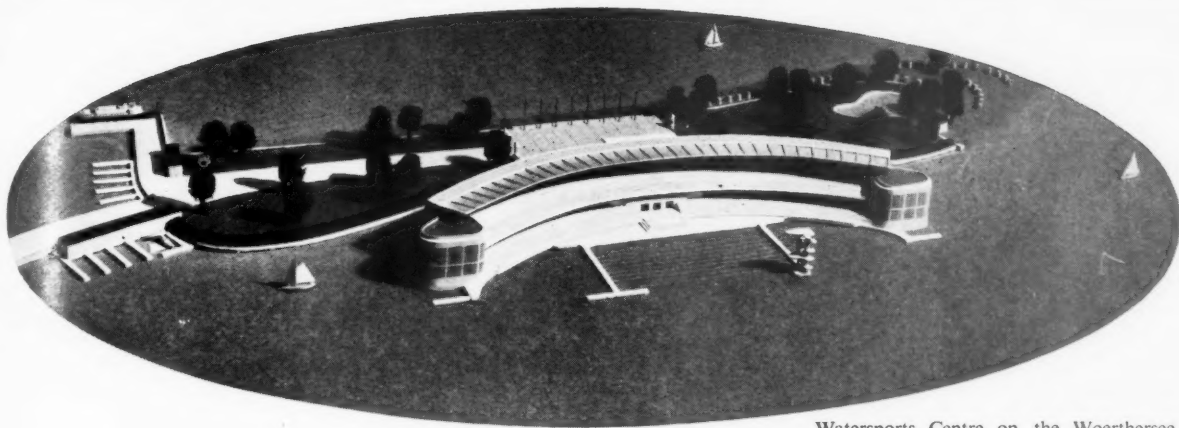


Above: The Athletics Centre at Varkaus, Finland, by Yrjö Lindegren. Awarded first prize in the town planning section. The Centre is planned on a wooded peninsula



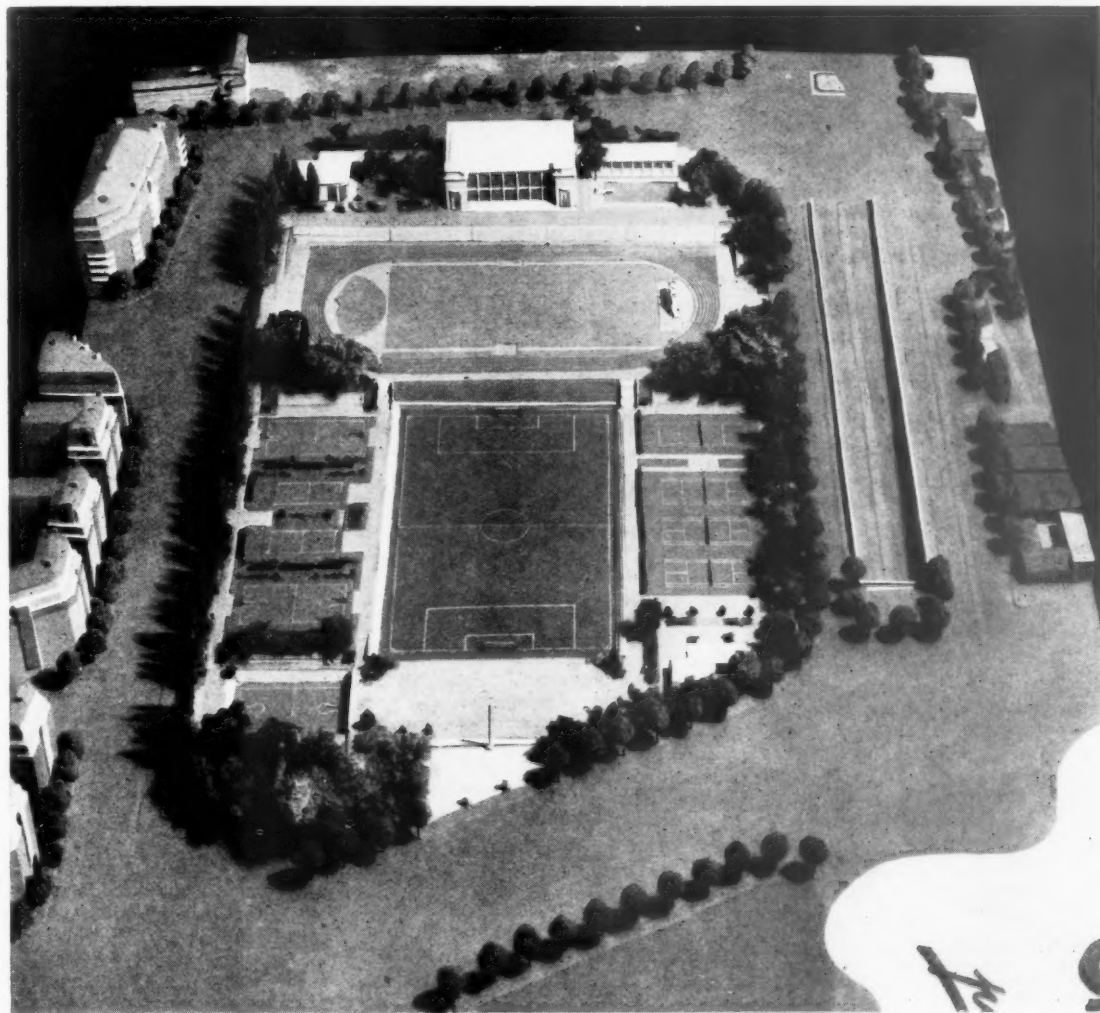
Above and to the right: Two portions of the model of the Swiss Federal Sports and Gymnastics Training Centre at Magglingen by Werner Schindler and Dr. Edy Knupfer. Awarded second prize in the town planning section. The whole model is 27 ft. long, the various units being planned as clearings in woodland. On the left of the lower photograph is an open-air theatre





Watersports Centre on the Woerthersee in Carinthia, Austria, by Josef Jirasek. Planned on an island connected to the mainland by a causeway

Below: The Stade Elisabeth Physical Training Centre, Porte d'Orleans, Paris, by G. Sabrou. One of 40 sports centres to be built in the Paris suburbs. An example of close planning on an urban site





Portrait of William Kent by Bartholome Dandridge (National Portrait Gallery)

ON THIS DAY, 12 April, 200 years ago, there died in his rooms at Burlington House, Mr. William Kent, architect, garden designer, decorator and painter; he was buried at his own wish, in the vault of his life-long patron, Lord Burlington, in the chancel of Chiswick Church.

With commendable exactness the Library Group has decided to celebrate this bicentenary with an examination of Kent's life and works, but I would have wished that someone more authoritative and more fully conversant with the subject had been asked to talk to you tonight.

For so well-known a figure, it is strange that there are considerable gaps in our knowledge of the life of Kent; I have found it difficult to answer some of the questions which I put to myself when I sat down to accede to your request. I hope, therefore, you will bear with me if in some things I seem too brief and cursory or in others somewhat too detailed. Let us start at the beginning:

William Kent was the son of poor parents and was born in Yorkshire (the exact location seems uncertain, it has, in error, been suggested often as Rotherham) in the year 1685. He received the rudiments of education in much the same way as any boy of his class at the time and was, at the age of 14, apprenticed to a coach-painter; not, in those days, an uncommon start for a future painter-artist. He at least learnt then the use of colours and brushes, but he absconded from his master and his home and found his way to London about the year 1704. Here he tried to support himself as a portrait painter, at the same time making some attempts at larger historical compositions.¹

¹ Walpole: *Anecdotes of Painting in England*. Pilkington: *Dictionary of Painters* (1825?), vol. I, p. 483, with engraved portrait by Bannermann.

Gould: *Dict. of Painters, Sculptors, Engravers and Architects*, 1839, vol. I, p. 256, et seq.

Redgrave: *Dict. of Artists of the English School*, ed. 1874, p. 238.

A.P.S. *Dict. of Architecture*, art. 'Wm. Kent'.

William Kent and his Drawings

Talk given to the R.I.B.A. Library Group

By S. Rowland Pierce [F], Dist.T.P.

Kent would appear to have been possessed of an attractive personality, presentable and a good talker; he soon made himself acquainted with friends who were prepared to help in his ambition of becoming a painter. Ultimately he attracted the attention and interest of some gentlemen of his own county; for the more interesting and intimate details of this circumstance we are indebted to Margaret Jourdain, who has already written on some recently discovered letters which throw light on the early life of Kent and who is now engaged on a more extensive study shortly to be published.²

One of these early patrons was Burrell Massingberd, the eldest son of Sir Drayner Massingberd, of Ormsby, Lincolnshire; about the year 1711 he and some others subsidized Kent so that he could proceed to Rome. He started off some time in 1712 and for six or seven years studied and painted in Italy and mostly in Rome. In 1713 Massingberd induced Sir John Chester (1693-1747), of Chicheley, in Buckinghamshire, to join him, each in the sum of £20, further to finance their protégé. Another contributor to this same cause, whether in combination or individually is not quite clear, was Sir William Wentworth, of Yorkshire, who allowed our budding artist the sum of £40 annually for seven years.

Kent's life in Rome seemed to be much like that of any artist who was disposed to enter into the many-sided cosmopolitan atmosphere of that city. He studied painting and tried his hand at portraiture; he copied the works of Domenichino, Carlo Maratti, Guido Reni and other artists of the Baroque vogue of the day, with some departures from current taste in copies of the work of Correggio. The copies were often sent home to his English patrons, for whom Kent also obtained marbles and other antiques in various parts of Italy; in one case at least there was some trouble with the authorities over these exports, but it was duly smoothed over. He also exhibited his work in Rome and presumably he sold his pictures and copies. He studied under the painter Cavaliere Benedetto Luti, who died in 1724.

Kent met many important people in Rome and two at least were to become his life-long patrons or clients: the Earl of Burlington and that famous Norfolk gentleman, Thomas Coke, who afterwards became the Earl of Leicester and the builder of Holkham Hall. Kent in a letter to Massingberd remarks, not I feel without a little conceit, that he was drawn towards

² Jourdain: *Early Life and Letters of Wm. Kent*, in *Country Life*, Vol. xcvi, No. 2484, 25 August 1944, pp. 332-335.

'great people' as if by a magnet. What is more important he recounts, in another letter, that he is making drawings of 'ornaments and architecture and getting things that I think will be necessary for use in England'.

Kent at this time also received encouragement from his friend John Talman, the son of Thomas Talman, the architect; in fact there is some indication that he travelled out to Rome with Talman and may even have lived with him for a time when they had arrived at their destination.

In 1714 Kent was travelling a good deal in northern Italy; he visited Florence, Bologna, Venice, Mantua, Parma and San Marino; in 1715 he won a Papal Medal in the Accademia (a second class one, as a painter) and received a letter from Massingberd congratulating him on the fact. We also know that he spent some time learning to paint in fresco; if he actually executed murals at that time in Rome it would be interesting to know if any still survive; in every way the experience must have had considerable influence on his subsequent decorative work in England.

Kent left Rome in 1718; in the next year we find him in London, living in a house in Savile Row;³ later he settled permanently in Burlington House, where he remained with his patron and colleague, the architect-dilettante, Lord Burlington, leader of taste in building, decoration and the arts.⁴

In these favourable circumstances Kent soon started to climb to a position of considerable fame and fashion. It was now that he turned his attention to decoration and to architecture and, as time went on, 'his oracle,' says Horace Walpole, 'was so much consulted by all who affected taste, that nothing was thought complete without his assistance. He was not only consulted for furniture, as frames of pictures, glasses, tables, chairs, etc., but for plate, for a barge, for a cradle. And so impetuous was fashion that two great ladies prevailed on him to make designs for their birthday gowns. The one he dressed in a petticoat decorated with columns of the five orders; the other like a bronze, in a copper-coloured satin, with ornaments of gold'.

So, the indifferent painter had become an architect, an arbiter of taste and what we now should call an 'industrial designer', all rolled into a single well-known personality, practising in an intimate Georgian London. His work was not, however, all confined to London, for he had many greater or less

³ Kent's will: (P.C.C. 551 Tenterden); see Summerson: *Georgian London*, 1945, f.n. p. 84.

⁴ Summerson: *op. cit.*, pp. 84, 85.

commissions or consultations in many parts of the Kingdom.

Kent's decorative work, interiors and remodellings, owed much to his experiences and studies abroad; he had acquired something of the liveliness and display of the later baroque experiments in Italy. His work at Kensington Palace shows the influence of this feeling, especially in the Cupola Room and in the remodelling of the Presence Chamber which is in the Wren part of the palace. Kent also painted or supervised the designs for ceilings at Badminton, Esher, Rainham, in the entrance hall at Stowe and in the now vanished house for Sir Richard Childs at Wanstead. It should be noticed that Kent used in some of these works what he called grotesques; these were really adaptations of Roman reliefs or of Pompeian wall-paintings; there is no record that Kent went to Pompeii, but there is no reason to doubt that he had plenty of opportunity to study this kind of ornament in the work of Giulio Romano at the Villa Madama or at Mantua or that of Fontana in the Vatican.

His furniture was often heavy and cumbersome, though this might be excused if it is remembered that Kent designed much of it for special positions, almost as fixtures: he was an architect and not a furniture designer and the emphasis was on the effect of the ensemble. His fireplaces followed the manner of Inigo Jones, in common with much of his smaller work, with, however, a tendency to become overlaid with pompous and not always clearly understood classical elements, pediments, consoles and busts.⁵ He designed a pulpit in York Minster,⁶ and a choir screen in Gloucester Cathedral, which was removed in 1820. He tried his hand at the Gothic, encouraged perhaps by Walpole and an idea that he must keep abreast of any new taste. Gould treats this phase with disdain and observes, 'As Kent's genius was not universal, he has succeeded as ill in Gothic. The Kings-Bench in Westminster and Mr. Pelhams house at Esher, are proofs how little he conceived either its principles or graces.'⁷

Kent's drawings for the Royal Barge, built for Frederick, Prince of Wales, are in the collection of the Institute. They have been discussed in some detail by Professor Richardson who attributes much of Kent's inspiration in this design to the work of Daniel Marot, who came over to England in the entourage of William III.⁸ The actual barge is now in the Victoria and Albert Museum.

It would be impossible in this short talk to pass in review all the architectural works of Kent, and to give a catalogue-list would be wearisome. The work at Holkham Hall (1734) was undoubtedly shared with his client Thomas Coke, his patron Lord Burlington and with the architect Robert Furze Brettingham, though it is fairly safe

⁵ Vardy: *Some Designs of Mr. Inigo Jones and Mr. Wm. Kent*, 1744.

⁶ Vardy: *ibid.*

⁷ Gould: *op. cit.*, p. 257.

⁸ Richardson: *The Royal Barge*, in R.I.B.A. Journal, Vol. xxxviii (3rd S), 24 January 1931, p. 172 (illustrated).



Kent's End Elevation of Design for the House of Lords with a sketch of the King and a group of peers. (R.I.B.A. Library—Drawings Collection)

to affirm that the great hall is Kent's own work.⁹ At Houghton Hall, also in Norfolk, Ripley, was probably the prime designer, but he was certainly assisted in many ways by Kent.¹⁰ Houghton was built between the years 1722 and 1731 for Sir Robert Walpole.

Kensington Palace has been mentioned and other extant London buildings by Kent also are of considerable importance: the two best known are the symmetrical but picturesque Horse Guards, with its poor and uncomfortable plan.¹¹ The building was finished by Vardy in 1752, four years after the death of Kent. The St. James's Park façade of the Treasury Buildings in Whitehall was carried out during what seems to have been Kent's busiest period, 1734.

Devonshire House has long since disappeared (1924) to be replaced by the present building of that name: the site was that of old Berkeley House. The gates and posts of the courtyard of the Piccadilly front were re-erected almost opposite in Green Park and certain carved stone vases now adorn the entrance gate-piers of Trent House, near Cockfosters.

Lady Isabella Finch's house, 44 Berkeley Square and 17 Arlington Street for Sir Robert Walpole, are examples of town house work. There were many others, and Kent's influence on the development of the Bond Street area, north of Piccadilly must have been considerable: in any event, was he not living more or less on the spot?¹²

In summing up Kent's contribution to architecture it would not be unfair to say that in external design it was often dull in detail and dry in quality; there was, however, some saving grace in the fact that, although Kent was a prominent member of the Burlington-Palladian group, he saw things with a painter's eye and approached many problems with that kind of appreciation. The external composition was always the important factor, the rational relation to plan and use was a secondary consideration or was left to the ingenuity of his numerous collaborating contemporaries.

⁹ Brettingham: *Holkham Hall*, 1761.

¹⁰ Ripley (Ware and Kent): *Houghton Hall*, 1760.

¹¹ Summerson: *op. cit.*, p. 99.

¹² Summerson: *ibid.*, p. 84.

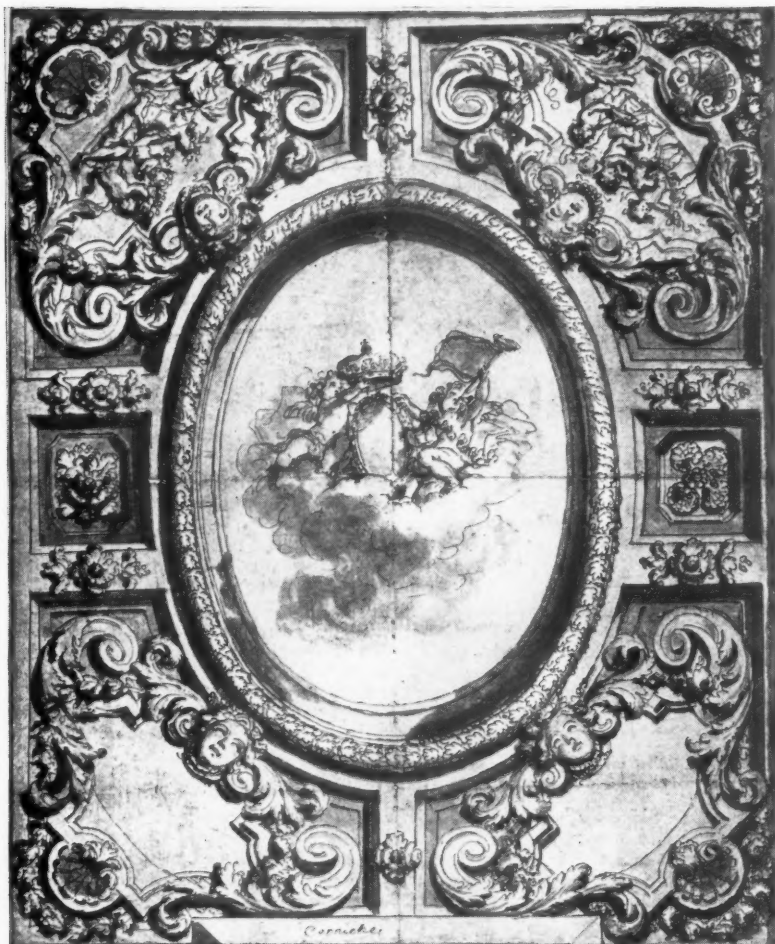
The gradual expansion of the lively baroque manner of Italy with which he must at one time have been so closely in touch seems only to have influenced the designs and decorations of the interiors for which he was responsible. Yet, in passing, I would suggest that the Italian sources of Kent's external design do not seem to have been analysed; he went to Mantua and Giulio Romano's work in that town seems to me to be a possible source of inspiration. If Kent's foreign sketches and study books survive they would perhaps enlighten us, but I do not know of the existence of any such documents.¹³

Of Kent's unexecuted work I would remind you of the original drawings in the Institute's collection for a new Houses of Parliament; these were submitted in 1739 and in their preparation Kent was assisted by Ripley; the statement accompanying the drawings is also signed by H. Fox and W. Gill.¹⁴ Kent also designed a palace for George the Second to be built in Hyde Park; I believe a model of this project still exists in the collections at Hampton Court Palace.

If Kent failed as a painter and only took an equal place with his contemporaries in the field of architecture, there is another phase of his work in which he was even more successful and was without doubt a pioneer. Kent is justifiably to be named as the father of English landscape gardening. He followed the tentative breaks from

¹³ There is, in the Soane Museum, a plan and elevation drawing of 'The Stables in the Royal Mews at Charing Cross' (taken down in 1827), No. xxxix, set 3, No. 8, and a drawing (plan and elevations) of a 'Country House and Park', No. xxxix, set 1, No. 5. These are possibly by Kent. The Soane Museum also possesses copies of the Houses of Parliament drawings. Since the above talk was given, a new drawing by Kent has come to light in the R.I.B.A. library: it was found amongst the Vardy drawings and is an early study for the tomb of Newton in Westminster Abbey.

¹⁴ Fiske Kimball: *Wm. Kent's Designs for the Houses of Parliament 1730-40*, in R.I.B.A. Journal, vol. xxxix (3rd S), 6 August, p. 733, and 10 September, p. 800, 1932 (illustrated). cf. Anon: *Drawings for the Houses of Parliament 1739*, in R.I.B.A. Journal, 9 January 1939, p. 228.



Design for ceiling of Royal Barge—not used. (R.I.B.A. Library Drawings Collection)*

formality practised by Bridgeman (who died in 1735 and was the 'inventor' of the 'Ha-Ha') and extended the idea of garden-into the general landscape.

I think there is no doubt that his early studies, as a painter, of Italian landscape led him to consider that the surroundings of buildings could be treated in a less formal manner than was evinced in the rigidity of traditional layout; the latter had received much recent support from the Netherlands.

He took his cue from the natural qualities of landscape; his motto was 'Nature abhors a straight line'.¹⁵ He felt, in the words of Horace Walpole, 'the delicious contact of hill and valley changing imperceptibly into each other, tasted the beauty of the gentle swell, or concave scoop, and remarked how loose groves crowned an easy eminence with happy ornament, and while they called in the distant view between

their graceful stems, removed and extended the perspective by delusive comparison'.¹⁶

Launcelot ('Capability') Brown was, of course, Kent's contemporary, but he lived till 1783 and his work owes much to the pioneering of Kent. The latter advised on the layout of many gardens and parks. The gardens at Esher, 'Where Kent and Nature vied for Pelham's love' (William Mason), and at Claremont and those in connection with his work for the Prince of Wales at Carlton House have always been noted as outstanding. Wanstead House Gardens have gone with the house; of Rousham in Oxfordshire, Walpole remarks that the work 'was most engaging' and the 'most elegant and antique'. Kent had much to do with the laying out of Kensington Gardens (with Bridgeman) and with Hyde Park and, although another hand was responsible for the re-modelling of St. James's Park, I suspect that Kent had

already had something to do with the project.¹⁷

I feel therefore that we must pay tribute to Kent for a development so essentially English; it was the result of a unique combination of the painter's eye and the architect's third-dimensional technique. It became a great vogue in this country and the influence of the new English garden extended to all parts of the continent and to America. That it was overdone and misapplied at later dates was no fault of the innovator, Kent.

There is a portrait of William Kent in the National Portrait Gallery, painted by Bartholomew Dandridge¹⁸; an engraved portrait (from a painting by William Aikman) in Walpole's *Anecdotes* and another in Pilkington's *Dictionary* of 1825; I have not been able to find the source of the latter engraving, if, that is, it was made from a painting. The Institute does not possess a portrait of Kent.

During his lifetime Kent was appointed Keeper of the King's Pictures and Principal Painter to the Crown (following Jervas), with a pension of £100; in 1726 he was appointed, in succession to Thomas Ripley, Master Carpenter of His Majesty's Works and Buildings and in June 1735 Master Mason to His Majesty, in which position he followed Nathaniel Dubois and received £200 per annum. He is reputed at his death to have left £10,000. Kent died in Burlington House, under the roof of his architectural patron, Lord Burlington.

This is all too brief an account of the full life of one who, if not ranking among our greatest architects, was at once a man of influential works and charm amongst many contemporaries of equal merits, James Gibbs, Isaac Ware, Campbell, Ripley and Leoni. Kent, fashionable and successful as he was, founded no school, either of architecture or gardening; though his influence on the latter was wide and lasting. As far as I am aware he had only one pupil in any true sense of the word, John Vardy, who finished Kent's work at the Horse Guards, was Clerk of Works at Kensington Palace and who died in 1765.

In 45 years, however, the coach-painter's truant apprentice had become William Kent the architect.

[The talk was illustrated by books containing photographs and engravings of Kent's work and the work of his collaborators. Also exhibited were all the known drawings for the Royal Barge, the report set of drawings for the proposed Houses of Parliament and the original drawings (? by Flitcroft) for Kent's *Designs of Inigo Jones*, published in 1727 and a manuscript account book kept by John Vardy in connection with the completion of the Horse Guards.]

¹⁵ The earlier layout of St. James's Park was carried out under Charles II, possibly under the influence of Le Notre himself; there is, however, a 'survey' drawing in the Soane Museum, probably culled from the engraving by Kip (*Le Nouveau Théâtre de la Grande Bretagne*) which may be something to do with Kent; the matter could be further investigated. cf. Gothein: *op. cit.*, Vol. II, Fig. 244.

¹⁶ Jourdain: *loc. cit.*

* cf. Drawing reproduced in R.I.B.A. Library Bulletin, Vol. 2, No. 3.

¹⁷ Walpole: *Essay on Modern Gardening*, 1785.

¹⁵ Gothein: *A History of Garden Art*, Eng. ed. 1928, Vol. II, p. 285.
cf. Amherst: *A History of Gardening in England*, 1895, pp. 257 and 261.

British Standard Specifications and British Standard Codes of Practice

By Edward D. Mills [F]

THERE APPEARS to be some confusion in the minds of architects concerning the difference between British Standard Specifications and British Standard Codes of Practice. This short factual note is, therefore, intended to give a brief outline of the origin of these two types of information document, and to indicate their respective fields of usefulness, in the hope that it will result in a greater and more efficient use of the material available.

British Standard Specifications

In 1901 a London iron and steel merchant, realizing the vast range of types and sizes of iron and steel sections, secured the interest of the Institution of Civil Engineers in a scheme for reducing this range to an ordered list of 113 different sections. As a result of this pioneer effort the British Engineering Standards Committee was formed for the purpose of preparing specifications of quality, dimension, and function of various engineering products. The results of this work were so satisfactory that the activities of the original organization were increased and its Charter extended to embrace the whole field of productive industry, resulting in the founding of the British Standards Institution in 1929. The British Standards Institution now covers four main groups of industries, building, engineering, chemicals, and textiles, with 50 separate industry committees representative of producers, users, distributors, and professional bodies concerned. There are no fewer than 11,000 voluntary committee members (including many members of the R.I.B.A.) of 1,500 active technical committees, and at least half a million copies of specifications and other publications are issued annually by the British Standards Institution for circulation throughout the world.

The object of a Standard Specification is to define the conditions which must be fulfilled in order that the product to which it applies will satisfy the users and at the same time can be manufactured without undue expense and difficulty. It deals with dimensions, performance standards, the quality of materials and workmanship, and the general fitness of purpose of the product concerned.

New Standards are not initiated by the British Standards Institution, but by either professional institutions such as the R.I.B.A., or trade associations, and new proposals are placed before the appropriate industry committee, who, if they agree with the proposal, set up a technical committee, if none already exists dealing with the particular product. All committees are continually in existence for the purpose of revising specifications; the cement committee formed in 1902, for example, still functions. The R.I.B.A. is

represented on the technical committees dealing with building materials and components with more than 50 members serving on a variety of committees in a voluntary capacity. The technical committees prepare a draft Standard, which is sent out by the British Standards Institution for comment to all interested organizations. From 700 to 1,000 copies of the draft are circulated in this fashion, and all the comments received are examined by the committee, who amend the draft as necessary. The final amended draft Specification is sent first to the industry committee concerned for approval, then to the Divisional Council, and finally published as a British Standard Specification.

The British Standards Institution maintains contact with similar institutions throughout the world, and steps have been taken to form an international co-ordinating association linking the British Standards Institution with similar bodies in 28 different countries. The Institution is financed by a Government grant, subscriptions from professional and industrial bodies, and by subscriptions from private members, together with the sale of Standards and other publications. Full details of the advantages and cost of subscribing membership can be obtained from the British Standards Institution. Architects would be well advised to consider the value of a wider and more intelligent use of British Standard Specifications in their work.

The British Standard Codes of Practice

The Codes of Practice Committee was established in September 1942, as the result of negotiations initiated by the Minister of Works in conjunction with the Ministry of Health and other Government Departments. It consists of members of the principal professional institutions, the B.S.I. and the B.I.N.C., with members nominated by various Government Departments and a chairman appointed by the Minister of Works. The terms of reference of the committee are: 'To direct the preparation of Codes of Practice for civil engineering, public works, building and constructional work'. The method of preparing Codes of Practice is similar to that employed in the preparation of B.S.S. with technical and drafting committees. These committees, however, are convened by the various professional institutions represented on the Main Codes of Practice Committee and are assisted by experts from the Department of Scientific and Industrial Research, principally the Building Research Station, and from the Ministry of Works. The technical content of a Code is for the guidance of technicians and craftsmen in the execution of their work. A Code is intended to present a definition of recom-

mended methods by which materials can be used to perform the functions required of them, and they are so written that they form a concise and easily understood document to convey the designer's intention in the proper execution of a specific job. A Code of Practice is intended to be a code of good practice in the particular field to which it relates.

Building Codes contain the following information:

1. Functions required to be performed. The Codes should lay down functional standards which would guard equally against excess as against inadequacy.
2. Technique to be followed to achieve a building element which can perform the above functions.
3. Organization and co-ordination required to ensure that the various techniques involved are properly related and can each proceed without delay or confusion.

The Codes of Practice Committee (on which the R.I.B.A. has representatives, together with the responsibility of convening three committees dealing with (a) external walling, internal walls and partitions; (b) weather resisting roof coverings; (c) finishing series) is sponsored by the Ministry of Works and financed by a Government grant. The publication of Codes and other literature is handled by the British Standards Institution.

It will be seen that the Codes of Practice should prove invaluable to architects in assisting the development of building technique, the proper use of new materials, and to ensure that new buildings are soundly constructed with the proper consideration for the comfort, safety, and health of their users.

Asked for definitions summarizing the functions of the two bodies; the Codes of Practice Committee said:

A British Standard Specification sets out the technical requirements with which materials, components or appliances purporting to be in accordance with the British Standard Specification should comply and prescribes, where practicable, the tests to be carried out to prove compliance with such requirements.

A British Standard Code of Practice sets out those requirements which are generally recognized as good practice in the execution of building or civil engineering construction. It prescribes the method of use, erection or installation of materials, components or appliances according to their properties and the performances for which they are intended; it also deals where necessary with structural design methods.

Readers are also referred to the R.I.B.A. Sessional Paper, *The Work of the Codes of Practice Committees*, by C. Roland Woods, M.B.E., published in the JOURNAL of May 1945, Vol. 52, Third Series.

Review of Construction and Materials

This section gives technical and general information. The following bodies deal with specialized branches of research and will willingly answer inquiries.

The Director, The Building Research Station, Garston, near Watford, Herts.

Telephone: Garston 2246.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks.

Telephone: Princes Risborough 101.

The Director, The British Standards Institution, 28 Victoria Street, Westminster, S.W.1.

Telephone: Abbey 3333.

The Technical Manager, The Building Centre, 9 Conduit Street, W.1. Telephone: Mayfair 8641-46.

An Electro-steam Cooker. This compact appliance provides for cooking by electricity and by steam at the same time, and it also gives a supply of hot water for domestic purposes, and boiling water when required. Hot water comes from a storage tank which has two immersion heaters, each controlled by a thermostat. The upper heater gives sufficient hot water for ordinary washing-up purposes, but when a bath is required the lower heater is switched on, and the two combined will ensure a supply of some 22 gallons of water at 160 degrees F., according to the thermostat setting. If it is wished to cook by steam the food is put into the steaming wells that are sunk in the top plate, and steam is turned on by adjusting the controls. If boiling water is required a foot pedal is operated and boiling water comes out of a spout placed in the front of the cooker, and safeguards are incorporated to prevent inquisitive children from turning on boiling water. A neat switch panel, including a clock, is placed at the top of the splash-back. The height, width and depth are respectively 36 in., 42 in. and 21 in. The loadings are 1,200 watts for the boiling or steam tank, 2,000 for the grill and simmering plate, and 2,500 for the oven. The upper immersion heater is 700 watts and the lower 2,000.

This appliance does away with the need for a domestic boiler with its chimney stack, or for a hot water cistern, so that a certain amount of plumbing is eliminated, and the makers claim that in an ordinary-sized house the balance sheet of costs will show a saving of nearly £30. The outward appearance of the cooker has been designed in conjunction with the Council of Industrial Design, who have rounded all corners and done away with 'frills', so that it should be easy to keep the vitreous enamel casing clean. The cooker is made by the Gillott Electro-steam Cookers, Ltd., of Cotswold Works, Chalford, near Stroud, Gloucestershire.

The Nelson Lock. Insurance companies do not much like cylinder locks because they are capable of being forced open with a knife, or, if the door is glazed, the inside handle can be turned after the glass has been broken, while if a mortise lock is fitted as an additional safeguard it means that two keys must be carried; the Nelson lock overcomes these disadvantages. In

appearance the lock and the key are of the usual 'Yale' pattern, but when the door has been shut a part turn of the key locks the bolt and it cannot be turned by the inside handle. When opening the door from the outside a similar turn of the key, but in the opposite direction, holds the bolt back, so that the hand can be taken off the key if necessary. The lock is suitable for doors from 1 in. to 2½ in. thick, and may be had in various finishes. A master key can also be provided. The lock is made by H. Mullins (Early) Ltd., Bede Trading Estate, Jarrow, Co. Durham.

Prestressed Reinforced Concrete. The Reinforced Concrete Association's Technical Paper No. 5 contains a lecture read before the Association by Mr. K. Billig, A.M.I.C.E., in November 1946. The theory of prestressed concrete is not new, as it was the subject of discussion among engineers at the end of last century, but practical application was not taken in hand until two or three decades later, when the necessary high grade material had become available. The purpose of the lecture was to present a broad picture of the subject for the information of members of the Association who had been absent on war service and so had not been able to follow recent developments. Mr. Billig gave a succinct account of the history, theory and application of pre-stressing and post-stressing, and did so in lucid language, purposely avoiding detailed descriptions of structures and methods of design, as these are available in published works. The lecturer claimed that pre-stressing permits a saving in steel of about 85 per cent, and a reduction in dead weight of some 70 per cent, compared with ordinary construction; the economies being most pronounced in the case of heavy loads and long spans. This technical paper has been issued by the Reinforced Concrete Association, 94/98 Petty France, London, S.W.1, and costs 5s. 3d. including postage.

Plimber. The difficulty of getting timber, or at least enough of it, has given an incentive to the use of wood in non-licensed forms, such as flooring made of off-cuts, short ends and so on. With this idea in mind a material has been produced under the generic name of plimber, a plastic composition board made largely from wood waste and agricultural fibres bonded with

special synthetic resins. Several varieties are made; there is plimberwood, a medium density board; plimbercore; plimberpanel, a denser board intended for furniture and general purposes; and plimberfloor, made in the form of high density flooring tiles which can be had in colours and are available for the home market. The normal size of plimberwood sheets is 8 ft. 6 in. by 4 ft. wide; they can be cut, sawn and drilled with ordinary tools in the same way as timber. The co-efficient 'k' for thermal conductivity is given as 0.8, and the weight as 40 lb. per cubic foot. The material is a product of British Plimber Ltd., 90 Regent Street, W.1.

Fluorescent Lighting. The merits and demerits of this system of lighting are much in architects' minds at present; meanwhile it is evident that some manufacturers are giving thought to the design of the fitting holding the tubes. So far they have been rather 'troughy', but there is now an example pointing the way to better design—the Atlas—and it can be had in 2 ft. lengths of 40 watt rating. A shallow channel contains the choke, condenser, and a quick-start unit designed to do away with the usual starter switch and to give positive starting within one second. The reflectors are made of medium opal perspex held in place by pressed steel end-caps fastened to the body by snap action ball fasteners, so that they can easily be taken off for cleaning purposes. Various methods of suspension are available, and when the tubes are installed in pairs wired in series, only one set of control gear is needed. The usual daylight and warm white colours can be had, as well as a new tint called peach, of a somewhat warmer colour. Doubtless this short tube will in many cases fit in better than the long ones in the general decorative scheme of a room. The Atlas unit is made by the Thorn Electrical Industries, Ltd., of 105 Judd Street, W.C.1.

The Lammas Coupler. The usefulness of rubber in the construction of pipe joints has evidently appealed to more than one manufacturer for, besides the Keeseal described in last month's JOURNAL, there was another exhibited at the recent B.I.F. It is called the Lammas, and is some 2½ in. long, in copper. The casing is swaged inwards at each end. Within the casing moulded rubbers are bent in a U form round the ends of 'expanders', the bend of the U fitting against the swaging, so that when the pipes are inserted in the coupler the two thicknesses of rubber and the expanders are squeezed together against the inside of the casing. A pierced internal diaphragm acts as a stop to the inserted pipes and ensures free water-way. The coupler is made in two types, one for use in copper tubing to B.S. 659/1944, and the other for iron tubing to B.S.1387/1947. If it is desired to break the joint a special extractor tool can be inserted between the pipe and the coupler, allowing the pipe to be withdrawn without destroying the rubber sealing ring. The connector is made by Messrs. Projects and Development, Ltd., of 26 Tontine Street, Blackburn, Lancashire.

Practice Notes

Edited by Charles Woodward [A]

MINISTRY OF TOWN AND COUNTRY PLANNING. A Bulletin of Selected Appeal Decisions made by the Minister has now been published. It is No. 3, dated April 1948, and is obtainable at H.M. Stationery Office, price 6d. net.

An Explanatory Memorandum of the Town and Country Planning (General Development) Order, 1948, has now been published and is obtainable at H.M. Stationery Office, price 3d. net.

The Town and Country Planning (Transfer of Property and Officers and Compensation to Officers) Regulations, 1948, have now been issued and are obtainable at H.M. Stationery Office, price 5d. net. Circular No. 46, dated 15 June, is also obtainable, price 1d., and explains the Regulations. (S.I. 1948, No. 1236.)

The Town and Country Planning (General) Regulations, 1948, have now been issued and are obtainable at H.M. Stationery Office, price 2d. net. These Regulations make provision for various procedural matters under the Town and Country Planning Act, 1947, and prescribe the time and manner in which certain notices may be given and claims made under the Act.

Circular No. 51 accompanies the Regulations.

Circular No. 53 concerns the coming into operation of the new Act and is addressed to local authorities in England and Wales. It makes suggestions as to the carrying out of their functions.

Circular No. 54 concerns Grant Regulations made under Sections 93-96 of the Act, and is addressed to local authorities in England and Wales.

THE LAW OF PROPERTY ACT, 1925, SECTION 84. Power to discharge or modify restrictive covenants affecting land. This case was an application under Section 84 of the above Act for the release of two restrictions on a corner site measuring approximately 200 ft. by 70 ft. on an already largely developed small housing estate. The restrictions were as follows:

1. The building line for each private dwelling house shall not be less than 40 ft. from the road frontage nor shall the said frontage of each portion of land allotted to each house and garden be less than 37 ft. or thereabouts to the road nor have a depth of less than 200 ft. or thereabouts therefrom.
2. That no dwelling-house or other erection shall be erected on the land unless the plans and elevations thereof shall be first submitted to and approved by the vendor or his surveyor.
3. In addition there was a previous covenant which went with the land to the effect that only one house was to be erected on each plot to the value of not less than £1,000 exclusive of garage.

On learning that the applicant was going to apply for the release of these restrictions local objection was aroused, and finally there were 49 objectors to the application exclusive of membership of the local residents' association. Their objections may be summarized as follows:

1. It would defeat the purposes of good town planning as at present exemplified in the neighbourhood.
 2. The existing covenants are reasonable.
 3. It would interfere with amenities and/or reduce the value of the property.
- In addition the objectors immediately adjoining the site complained of the possibility of overlooking.

The original covenantees made certain specific objections as follows:

1. To build two detached bungalows on the applicant's site will detract from the present amenities of the area.
2. The majority of the dwellings on the estate occupy much larger plots than those specified as the minimum.
3. To develop the applicant's plot with two bungalows would establish a precedent resulting in a greater future density of housing on the unbuilt portion of the estate.
4. If the applicant's plot is divided into two there will not be sufficient garden ground.

The various objectors claimed compensation ranging from £150 to £1,500.

The applicant's case was based on the following points:

1. The applicant's proposals, by subdividing this corner plot across its width instead of down its length, obviates a long length of garden fencing flanking the road and instead surrounds each bungalow with an open garden which gives ample opportunity for an interesting layout and planting.
2. The construction and appearance of the two bungalows will be in keeping with the remainder of the estate and is fully equal to the three bungalows and one house that have been built on the estate since 1945.
3. The original layout of the estate as approved by the Epsom Rural District Council in 1930 has not been followed, and as a result the applicant's plot is an odd corner site left over from the development as actually carried out, and the applicant's proposals, although contravening the building lines specified in the restrictions, are the only possible way of developing this particular site.
4. Site measurements were taken to prove that many of the houses built on this estate before the war had already contravened the building lines specified, in particular the bungalow on the corner site immediately opposite the applicant's plot where the building lines are 15 ft. to one frontage and 25 ft. on the other.
5. The two bungalows proposed to be erected on the applicant's land do not exceed the density prescribed as minimum for the estate and having already received

the approval of the local council under town planning it is obvious that expert opinion regards the development as reasonable and in keeping with the rest of the estate.

6. As the only remaining plots on the estate have their boundaries already determined, any development of the applicant's plot cannot affect the density obtaining on the remainder of the estate.

7. Maps were prepared showing the development of the estate and surrounding development at various dates from which it was proved that this surrounding development had already reduced the amenities of the estate since the time the original restrictions were imposed.

8. In view of the foregoing points the applicant considered that no loss of amenity to any of the objectors was involved, and after a hearing lasting two days the official arbitrator ordered that the restrictions be modified as follows:

- (1) The erection on the aforesaid land of two bungalows.
- (2) The erection of one of the said bungalows nearer to the boundary of Delta Road than 40 ft.
- (3) The erection of the said bungalows without the necessity of submitting the plans and elevations thereof for approval by any person save the appropriate local authority.

Subject to the following conditions:

- (i) The said bungalows shall not differ substantially in size, construction or elevation from the plan deposited with and approved by the Local Council.
- (ii) No part of the said bungalows shall be constructed nearer to the south-east boundary than 15 ft., nor to the remaining boundaries than 35 ft.
- (iii) No windows in the north elevation of the bungalow nearer to the south-west boundary shall be glazed with unobscured glass.

In addition, £110 and £45 compensation were directed to be paid to the owners of the two plots immediately adjoining the applicant's land, and costs to the objectors amounting to approximately one guinea each.

MINISTRY OF WORKS. Licences for Building Work (Defence Regulation 56A). Treatment of Certain Professional Fees and the Licensing of Increased Costs.

1. *Exclusion of professional fees from the total cost of a building operation.* It has been represented that difficulty is arising as a result of the inclusion in licences of the professional fees of an architect, a surveyor or an engineer acting as such, and that these charges should be omitted from the sum licensed. The Minister of Works has decided that in appropriate cases these fees may be specifically excluded from the sum mentioned in the licence, and this will be done by the following endorsement on the licence, after the figures specifying the permitted cost of the work 'exclusive of any professional fees paid to any architect,

surveyor, or engineer acting as such in an advisory and/or supervisory capacity in connection with the work'.

The endorsement will not apply to the salary paid to an architect, surveyor or engineer who is a member of the staff of the contractor carrying out the work.

Professional advisers or other persons should state when making an application for a building licence that the professional fees have been excluded from the cost of the work and such fees will subsequently be treated as additional to the sum specified in the licence, provided the licence is endorsed as already indicated; in any case of doubt the Regional Director of the Ministry of Works should be consulted.

2. *Amendment of licences to cover increased costs.* The sum authorized by a building licence is sometimes exceeded for reasons which could not be foreseen, although no work outside the scope of that licensed has been carried out. In such cases the defence afforded by sub-paragraph (a) of paragraph (6) of Defence Regulation 56A is available, and the persons concerned are normally advised in writing that no action will be taken. It has been represented that the issue of such a letter does not resolve the difficulties of professional advisers who have to give a certificate inconsistent with the licence, and as there is no power under the Regulation to issue retrospective licences the Minister of Works has agreed that the sum shown on the original licence may be amended by the Licensing Officer, provided that a request for this to be done is made in writing by the building owner or the person paying the cost of the work.

This arrangement does not absolve the builder, or building owner, architect or other professional adviser from the responsibility of applying for a supplementary licence if it becomes apparent in the course of the work that the cost will be exceeded. Prior approval will still be necessary if work outside the licence is to be done, and a supplementary licence will be issued for such work as is considered essential. In no circumstances will an amendment to the original licence be made in any case where work outside the terms of the licence has been carried out. (21 June 1948.)

R.I.B.A. STANDARD FORM OF CONTRACT. The Joint Contracts Tribunal consisting of representatives of the Royal Institute of British Architects, the National Federation of Building Trades Employers and the Royal Institution of Chartered Surveyors issue the following Practice Notes:

Practice Note (5): Invitations to Tender. The Joint Contracts Tribunal is of the opinion that as a matter of practice the architect should, where possible, state in the preliminaries the priority of the work for which the contractor is invited to tender and that tenders should accordingly be submitted on the basis of that priority.

Practice Note (6): Clause 18—Delay and Extension of Time. The Joint Contracts Tribunal recommends that the following additional clause be added after Clause 18:

'18A. If in the opinion of the architect the contractor shall be unable for reasons beyond his control to secure such labour and materials as may be essential to the proper carrying out of the Works and such inability on the part of the contractor shall result in the Works being delayed, then and in any such case, subject to the provisions of Clause 18 of these Conditions, the architect shall make a fair and reasonable extension of time for completion of the works.'

Practice Note (7): The Employers' Liability Policy—Clause 25A. The Joint Contracts Tribunal have considered the phrase 'including the cost of workmen's compensation insurance' which appears in sub-clauses 1 (a) and 1 (b) of Clause 25A in relation to the repeal of the Workmen's Compensation Acts and the Employers' Liability Act effective from the appointed day (i.e. 5 July 1948) under the National Insurance Acts.

The National Insurance Scheme does not relieve employers of their liabilities towards their employees at Common Law, and contractors will need to continue to cover these liabilities by insurance. Inquiries have been made as to the title which insurance offices will normally after the appointed day give to a policy issued to cover these liabilities at common law. Advice has been received that this policy will be known as 'The Employers' Liability Policy'.

The Joint Contracts Tribunal accordingly recommend that the phrase 'including the cost of workmen's compensation insurance' referred to above should be amended in the R.I.B.A. Standard Form of Contract to read 'including the cost of employers' liability insurance'.

In regard to contracts current on the appointed day, the Joint Contracts Tribunal are of the opinion that, should effect need to be given to this provision of the contract, the phrase 'workmen's compensation insurance' should be interpreted as referring to the insurance of the contractor covering him against these liabilities towards his employees of which he is not relieved by the National Insurance Scheme.

After the repeal of the Workmen's Compensation Acts the text of the R.I.B.A. Standard Form of Contract should be amended as follows:

Clause 14 (a). Line 3/4. *Delete* '(other than the Workmen's Compensation and Employers' Liability Acts)'.

Clause 14 (b). *Delete* the whole.

Clause 25 A (1) (a). Line 4. For the words '(including the cost of workmen's compensation insurance and Third Party Insurance)' *substitute* '(including the cost of Employers' liability insurance and Third Party insurance)'.

Clause 25A (1) (b). *Ditto* as above.

Practice Note (8): National Insurance Act, 1946 (Appointed Day) Order 1948 (S.R. & O. 1948, No. 54). National Insurance (Industrial Injuries) Act, 1946 (Appointed Day) Order 1948 (S.R. & O. 1948, No. 53). In their Notice of September 1946 the Joint Contracts Tribunal called atten-

tion to the legal construction of Clause 25A of the R.I.B.A. Standard Form of Contract in relation to the increases in insurance contributions payable by Employers as set out in the Schedules to the National Insurance Acts in the following terms: 'Thus upon the legal construction of this clause any increase or decrease in the amount payable by the contractor in respect of such employers' contributions is not the subject of an adjustment of the Contract Sum under that Clause'.

The Orders above referred to, dated 13 January 1948, which came into operation on 23 January 1948, provide that the appointed day under the National Insurance Acts shall be 5 July 1948. They confirm the statement by the Prime Minister in the House of Commons on 9 June 1947 'that the present intention of the Government is to bring the Act into operation on 5 July 1948'.

After the appointed day the weekly contribution payable by employers in respect of the majority of their employees (namely, men between the ages of 18 and 70 earning remuneration at a weekly rate exceeding 30s.) will be 4s. 2d., that is to say 3s. 10d. under the National Insurance Act and 4d. under the National Insurance (Industrial Injuries) Act. The increase payable over the present contributions amounting to 2s. 10d. for Unemployment, Health and Pensions is therefore 1s. 4d.

Tenders delivered after notice of the date of the appointed day was given, namely, 9 June 1947, should have included for the additional contribution payable by the contractor after 5 July 1948 if the contract were not to be completed by that date.

In the case of contracts for which the tender was delivered before notice of the appointed day (i.e. before 9 June 1947) had been given and which are in progress on 5 July 1948 the Tribunal is of the opinion that the increased contribution payable by the contractor after that date should 'in equity' be admitted as an addition to the Contract Sum. The power of the architect to certify in such circumstances was discussed in the Notice of September 1946, and the same principles and practice then advised should be applied in the case of this class of contracts current on the appointed day.

In the case of contracts the date for completion of which was before the appointed day, but in respect of which an extension of time has been given so that the extended date for completion falls after the appointed day, the Tribunal is of the opinion that the right of the contractor to recover the increased contributions payable after 5 July 1948 would depend upon the circumstances which had caused the architect to grant an extension of time and accordingly no guidance of general application can be given.

PRICE BUILD-UP TODAY. THE BUILDER has published a reprint of articles which appeared in that journal dealing with labour constants which are used in the build-up of prices by an estimator, and which become the basis for an incentive scheme when a tender is accepted. The

publication is priced 5s. net, and is dated March 1948. It is obtainable from The Builder, Ltd., The Builder House, Catherine Street, London, W.C.2.

FACTORIES ACT, 1947. The Minister of Labour and National Service has made new regulations under the Factories Act, 1947 for the safety, health and welfare of workers employed in building operations. The Regulations, which are entitled the Building (Safety, Health and Welfare) Regulations, 1948, will come into force on 1 October 1948, and will supersede the existing Building Regulations under the Acts which were made in 1926 and 1931. (S.I. 1948, No. 1145, obtainable at H.M. Stationery Office, price 10d. post free 11d.)

MINISTRY OF HEALTH CIRCULARS. In guidance notes to local authorities regarding Compulsory Purchase Orders the Ministry state that it is not necessary to reproduce in full detail in the advertisement the Schedule to the Order, but the description of the land must be such as to make it readily identifiable. Unless there are special reasons it should not be necessary to insert in the advertisement the names of owners, lessees and occupiers of land. Compulsory Purchase Orders, advertisements and notices should express the purpose for which the land is being acquired with sufficient particularity to enable interested persons to decide whether they have grounds for objection or not. It is not sufficient to specify the purpose merely by reference to a particular section of an Act.

A recent Statutory Instrument (1948, No. 490) transferred to the Minister of Transport the Minister of Health's functions relating to confirming Compulsory Purchase Orders made under the Acquisition of Land Act, 1946, for street widening and improvement, parking places and other similar purposes, together with the giving of authorizations under Section 2 of the Act.

Circular 1676 of 1938 still holds good, and applications for loans for highway purposes should be made to the Divisional Road Engineer of the Ministry of Transport with the necessary plans, estimates and copy of the Council's resolution.

Circular 104/48, dated 21 June 1948, deals with Building Licences and the amending Order being made by the Minister of Works.

As from 1 July 1948 to 30 June 1949 work to the amount of £100 may be carried out without a licence on any property. Local authorities will now only be concerned with applications for licences in respect of housing. *All applications for work other than housing must be made to the licensing officer of the Ministry of Works.*

Licences for work to private dwellings will be given by the local authority where the authority is satisfied that the work should be allowed to proceed. 'Private dwelling' includes private garages, greenhouses or garden walls within the curtilage of a house, but does not include farm

houses, hotels, hostels, boarding houses, holiday camps or shops (with or without living accommodation).

Any work carried out in excess of the free limit of £100 is subject to licence whether done by paid or unpaid labour, and in future the value of unpaid labour (other than the labour of the owner or occupier of a building) should be taken into account on the rough basis of normal building rates within the area in computing the cost of any building work.

Shortage of timber and steel makes it quite impossible to introduce any relaxation at present of restrictions on the use of these materials.

Circular 106/48, dated 25 June 1948, informs local authorities that after 30 June, if it is proposed to requisition an unoccupied house, they should apply to the Minister's Principal Officer, who, if he is satisfied that the application should be granted, will issue a delegation authorizing them to requisition the particular premises. The powers hitherto given to clerks of local authorities are not therefore renewed by the Minister.

Circular 108/48, dated 25 June 1948, informs Housing Authorities that they may use part of their housing allocation for houses to be built by private persons under licence, and that applications for such houses need no longer be referred to the Principal Housing Officer for his prior approval. The total number of houses for which licences are issued must not in any case be more than one-fifth of the allocation. Priority should continue to be given to applications for agricultural houses recommended by the County Agricultural Executive Committee and for houses for miners and key workers in Development Areas.

This authorization does not apply to the replacement of war destroyed houses eligible for 'cost of works' payments.

Where a local authority has used up all their allocations and wish to deal with some pressing individual cases in advance of a further allocation, they should refer the matter to the Principal Housing Officer. A licence for private houses should relate to not more than one structurally separate building, e.g. a single house or a pair of semi-detached houses. The use of scarce materials should not be permitted to a greater extent than that adopted by the local authority in their own houses. The Minister has given to local authorities a discretion to license a house up to a maximum superficial area of 1,500 sq. ft. In determining the size and type of houses to be licensed in a particular area regard should be had to the size and composition of the family for whom it is intended. Every house so licensed must be subject to conditions limiting cost, selling price and rent chargeable.

The building cost and the selling price should be fixed on the basis of the cost of houses built by the local authority. The selling price should be the all-in, freehold figure. The maximum rent should be fixed by reference to the selling price and to the

rents payable in respect of comparable property.

Work covered by the licence must be started within two months of its issue, otherwise the licence automatically lapses, but the authority may issue a fresh licence for a further period of two months where they are satisfied that it was impracticable to start work within the two months. Licences should not be issued in respect of houses built for sale to unknown purchasers. Houses for sale built under licence must go and be seen to go to persons in need of homes. The identity of the owner-occupier should be known to the local authority before the licence is issued where the house is intended for an owner-occupier. Applications for the building of houses for letting may be considered, provided the authority is satisfied that the houses will serve genuine needs.

Circular 109/48, dated 30 June 1948, states that as it would appear that the cost of building the 950 sq. ft. standard house will be higher than was estimated at the time when contributions under the Housing (Financial and Miscellaneous Provisions) Act, 1946, were fixed, the Minister has decided that he would not be justified in reducing the level of contributions, and they will therefore remain as at present in respect of houses completed before 30 June 1949.

Circular L.R.L. 13/48 refers to building licences in the London Region. An adjustment of quotas as between local authority areas will be made to cover the next three months as a temporary measure, and if there is a case for an alteration of the quota application can be made to the Ministry. It may be found convenient to issue one licence in respect of reinstatement of premises war damaged, particularly where the major part of the value of the licence is necessary to bring the property up to a reasonable standard of comfort. In such cases the local authority should secure from the owner a written statement that the work covered by the application includes all the work necessary to effect complete reinstatement of war damage to the property, and the statement should be transmitted to the Regional Manager of the War Damage Commission.

The Minister of Health has recently had under consideration the question of raising the limit on the cost of rebuilding war-damaged houses from the present £3,000, having regard to the fact that the rebuilding of the smaller houses is now either completed or well under way, and also to the fact that the number throughout the country which would cost more than £3,000 to build is comparatively small. Applications within a limit of £5,000 may now, therefore, be considered.

MINISTRY OF TOWN AND COUNTRY PLANNING

Statutory Instruments. Town and Country Planning (Enforcement of Restriction of Ribbon Development Acts) Regulations, 1948 (1948, No. 1520).

These Regulations are obtainable at H.M. Stationery Office, price 1d.

Book Reviews

The Georgian Buildings of Bath, by *Walter Ison*. 11 in. x 7½ in. 212 pp. + 136 pls. Faber and Faber. 1948. £2 12s. 6d.

This book is worthy of a place on any architect's shelves if only for the superb collection of photographs, drawings and reproductions of old prints, illustrating the buildings of Bath from the beginning of the 18th century right up to the eighteenth-twenties.

The text is well arranged for reference, and contains a great store of information as well as entertaining gossip culled from the elder Wood's *Description of Bath* and other contemporary sources. The meticulously detailed descriptions of the various buildings make slow reading, however, and could in many cases have been condensed into the simple formula 'see Plate X'. One of the most valuable features of the book is a chronological map with buildings hatched according to date and marked with their architects' names.

In dealing with a city so rich in architecture it is inevitable that there should be some omissions. The only one for which I feel Mr. Ison deserves censure is Kensington Place, and that, not because its houses are in any way remarkable, but simply because the illustration of Kensington Chapel without its flanking buildings gives an entirely false impression. There is also one very surprising inclusion, namely, Palladio's design for a bridge.

It is a pity that after taking so much care to obtain accurate information Mr. Ison should have allowed one or two obvious errors to escape the proof-reading. For instance the Greek inscription on the Pump Room is incorrectly quoted, and one reads with some amazement that one of the rooms at the Guildhall is 37 ft. long, 22 ft. wide and 6 ft. high! Incidentally, Mr. Ison's familiarity with John Wood's writings ought to have saved him from the common error of speaking of St. John's Gate and Trim Bridge as though they were one and the same thing.

NOEL BRANDON-JONES [4]

Housing and the Family, by *M. J. Elsas*. (One World Books, No. 1.) 7½ in. vi + 136 pp. Meridian Books. 1947. 8s. 6d.

In the introduction attention is drawn to this strange aspect of the present housing problem, that, although the need for houses is now extremely great, 'in the not too distant future we may, with just as much effort as is now being applied to the attempt to find houses for the people, be trying to find people for the houses'.

This curious state of affairs will arise through an inevitable fall in the population due to the decline in the birthrate between the wars. Whether a fall in the population is a good or bad thing cannot be considered here, but it seems fairly obvious that if prevention is possible it should not be allowed to decline in-

definitely. The nightmare state of built-up but uninhabited country would be only one of the minor disadvantages of such a happening.

Bad, and inadequate housing may not be the primary cause of this decline, but it must be a contributory cause, and the provision of adequate housing must be one of the steps necessary to check it.

This book sets out to provide some of the data needed to determine the quantity and kind of housing required to provide adequate housing for the population—whatever it may be—for strange to say and as clearly shown by Dr. Elsas there is much needed information missing from the vast mass of data at present available. The ground covered is very wide, the present position is surveyed, future needs are estimated, housing standards are considered and suggestions—particularly interesting ones on rent rebates—are made.

The central feature of the book, however, is the result of an inquiry made for the Population Investigation Committee during 1944-45. It took the form of a questionnaire sent out to a number of Local Authorities ranging from County Borough to Rural District Councils and consisted of some 23 questions concerning the numbers, sizes, rents, amenities, etc., of houses built between the two wars.

It may not be a fair conclusion to reach, but it would seem from the answers given to the questionnaire and the analysis of them that most Housing Authorities have been going ahead without much thought for large or increasing families, and with little, if any, regard for their capacity to pay. Two vital matters if large families are to be encouraged.

Several times Dr. Elsas wisely stresses the importance of local or regional conditions being known—in a national census the lack of houses in one area may be balanced by the empty houses in some widely separated area—and in his last chapter urges that an annual housing census should be taken. This would appear to entail much work for many people, and though he shows that a period of ten years, between each census is too long, it seems to a layman in these matters, very doubtful if conditions change sufficiently rapidly to make an annual census necessary.

This is a most interesting book, and the compression of so much information and so many suggestions into so small a space is in itself a very considerable feat.

T. S. BARNES [4]

South Lancashire and North Cheshire Advisory Planning Committee: An Advisory plan, prepared by *R. Nicholas and M. J. Hellier*. 13 in. xiv + 154 pp. + pls. + folding maps and charts. Manchester. 1947. Prepared in co-operation with representatives of both Cheshire and Lancashire County Councils, this report completes the advisory proposals for a much wider area than the City of Manchester Plan (1945), and the Manchester and District Regional report which followed.

Although migration of population from the Lancashire section of the area has

continued for over 30 years, the report shows that there has been a net increase in the whole region of 118,000 persons.

The survey work is thorough and illuminating. The geographical position of the Manchester district gives it a temperate climate, but in some industrial sections the average daily sunshine is under 3½ hours. The attraction of the Cheshire areas to the South and South West of Manchester is emphasized, and there is still much good agricultural and market garden land which needs to be preserved, both for cultivation and to provide local green belts. Land may have a much higher agricultural value regionally than its national classification suggests.

A review is given of the public services in the area. It has long become evident that the sewage disposal undertakings, which number 175, must be reduced, and further study of the subject is necessary, particularly in relation to the effect of loss of water flow in the small rivers, which find their way into the Mersey.

The advisory area includes the largest urban concentration in the industrial north. The South Lancashire coal-field and the Cheshire saltfield both bring risks of subsidence, while the undeveloped coal-field, which lies under Manchester itself and extends westward and south-eastward, may raise similar difficulties for future generations. Among industries, textiles still lead, but engineering and allied trades run them close, and the chemical industry is of particular importance in Warrington and district. 'Special industrial' zones, properly segregated, are recommended.

With regard to communications, allowance has been made for the estimated increase or decrease in traffic expected from the relocation of population and industry in accordance with the zoning in the outline plan. The proposals for the southern part of the area have been co-related with the Cheshire County Advisory plan, and those for Lancashire with the Merseyside and the North and Mid-Lancashire advisory plans.

The eventual provision of green strips through developed areas must be part of a long term policy, but the authors courageously advocate the provision of green strips or parkways in connection with the majority of their arterial road proposals. No mention is made of National Parks and the necessity to preserve the wonderful scenic areas on the slopes of the Pennines and between Macclesfield and Buxton.

Chapters are given on the control of advertisements, and on smoke abatement. The inclusion in the Manchester Corporation Act 1946 of power to designate 'smokeless zones' was a useful step, and the introduction of district heating at Wythenshawe and elsewhere should bring gradual improvement.

The Report concludes with a Summary of the new powers now available for planning purposes, and a summary of recommendations. The very comprehensive appendices are accompanied by excellent maps, which will be invaluable for reference purposes.

W. R. DAVIDGE [F]

The Law of Town and Country Planning, by J. R. Howard Roberts, C.B.E. 10 in. xxii + 774 pp. Lond.: Charles Knight and Co. Ltd. 1948. 57s. 6d. post free.

The author of this work is Clerk to the London County Council and President of the Town Planning Institute, and he has produced a comprehensive volume on the law of town and country planning. Part 1 deals with legislation prior to the 1947 Act, together with a summary of the Act. Part 2 sets out the Act in detail with references to law cases, which may apply to the particular section. Reference is also made in parts 3, 4 and 5 to licensing planning, new towns and the acquisition of land. The Appendices include the Acts relating to Ribbon Development, Green Belt, Distribution of Industry, Building Restrictions (War Time Contraventions), and Special Parliamentary Procedure under Statutory Orders. There is a summary of the procedure in connection with the acquisition of land. Supplements will be issued containing Regulations, Rules and Orders made by the Minister under the several sections of the Act. The book contains 774 pages and may be said to be exhaustive. For those whose practice necessitates an intimate acquaintance with the law relating to town and country planning, this work should prove most useful.

Light Metals in Structural Engineering, by L. Dudley. 8½ in. viii + 218 pp. text diag. English Univ. Press for Temple Press. 1947. £1 10s.

This book is intended chiefly for engineering students; it includes useful data on the characteristics and possibilities of light alloys, and deals with strength of materials and theory of structures.

Furniture from Machines, by Gordon Logie. 9½ in. xii + 150 pp. text illus. Allen and Unwin. 1947. £1 1s.

This book, by an architect, is a useful addition to the very scanty references on present-day furniture manufacture and design.

An eloquent introduction by John Gloag is followed by fifteen well-illustrated chapters which range from an analysis of the essential qualities and basic shapes of furniture to a review of the various materials and methods employed in furniture manufacture together with typical examples resultant from the use of these materials and techniques.

After first impressions the book is disappointing; while the author's main theme is that the furniture industry has much to learn from modern machine methods, he goes little further than to illustrate his argument with examples of what the furniture manufacturers have already achieved in this direction.

As a practical handbook for the manufacturer it is too elementary, as a guide to the designer it is not sufficiently informative.

The section on woodworking machines, for example, goes into such detail as the functional shapes of saw teeth, the 'trueing' of cutter block knives and the like—of interest only to the apprentice

machinist—and is followed by many large illustrations from a woodworking machine manufacturers' catalogue.

The designer is much more concerned with the 'business ends' of the machines and what processes they can perform than with the appearance of the machines themselves. To this end the small sectional diagrams of the machines could very usefully have been elaborated and extended to illustrate more precisely the variety of operations that are possible.

The characteristics and processing of the other materials that are used, or that could be used, in furniture manufacture have been rather scantily dealt with, no mention is made of mechanical methods of assembly which play an important part in the economical production of furniture, nor is reference made to the importance of design in relation to the problems of transport of the finished articles.

In spite of these criticisms, however, the book should serve as a very useful and practical introduction to the study of modern furniture design, and if it will tempt some furniture manufacturers to turn aside from using the machine for period reproductions it will have performed a most useful purpose.

FREDERICK MacMANUS [F]

Flooring Hardwoods, Their Wear and Anatomical Structure, by F. H. Armstrong. (Department of Scientific and Industrial Research: Forest Products Research, Bulln. No. 21.) 9½ in. 12 pp. + pls. H.M.S.O. 1948. 1s.

This report dealing with the behaviour of hardwood flooring under heavy industrial and other traffic, shows how the suitability of hardwoods for flooring can be judged. Such information is needed today when many new hardwoods from the Empire and foreign countries are being introduced, as possible substitutes for well-known hardwoods now unobtainable.

Photo-micrographs confirm that the resistance of wood surfaces to actual breakdown is not entirely related to density; it is appreciably affected by anatomical structure, particularly the arrangement, size and distribution of the pores. An outline is given of impregnation treatment to improve the wearing qualities of coarse-textured hardwoods.

Shrewsbury: A Rich Heritage, by Arthur Walburgh Ward. 10½ in. × 8½ in. vii + 68 pp. incl. 18 pls. + pls., mounted + endpapers. Shrewsbury: Wilding. 1946.

Shrewsbury, described by the DAILY EXPRESS as being in Shropshire and pronounced by the well-brought-up with an O, was listed in Domesday as a City. Since then it has been besieged by the Welsh, fortified by Robert de Montgomery, whose elder son, Roger, was expelled by Henry I and 60,000 men, taken and re-taken, fortified and re-fortified, served as headquarters of Edward I during his campaign in Wales, the scene of tournaments, parliaments, trials, executions and battles until it gained comparative peace from the time of the accession of the Tudors.

As a prosperous and vigorous place, and

in spite of being at the meeting of seven railway lines, thirteen county roads and the highest navigable point on the Severn, it had a lucky escape from the worst evils of the Industrial Revolution and was not seriously knocked about during the last war. If its luck continues, and it escapes Planning 1944, atom bombs, the efforts of preservation societies and the author of this beautiful book to put it in a glass case, it will continue on its happy way.

It is still an important horse, cattle and sheep market, the centre of two packs of foxhounds in addition to the eight others in the county, a pack of beagles and a pack of otterhounds. Shrewsbury Horse Show and Shrewsbury Flower Show are important events in the English calendar, there are three breweries and a famous public school. It is not yet a suburb of London or Birmingham.

Mr. Ward is to be thanked for the good influence he has brought to bear in his official position, and congratulated on having the opportunity to write about such a place. He has done it well. The book, which should be studied by borough surveyors and chief sanitary inspectors as well as architects, contains many beautiful photographs of the buildings which remain to illustrate the history of Shrewsbury, and they are faithfully and lovingly described. Other photographs show that he is most anxious about the future of the place, and it is hoped that the scrupulous care which he so rightly demands in any future alterations and additions will not be lavished merely on a collection of neo-Tudor and neo-Georgian buildings such as he illustrates and admires. Shrewsbury can never be just a museum piece, and, although there is a great deal wrong with the 20th century, surely there are enough good architects about to let it have its fling, and if they may have a go there is a chance that the tradition of good building which exists in Shrewsbury now, may be carried on through yet another century.

H. CLIST [F]

Devon and Cornwall. A preliminary survey. University College of the South West, Exeter: Survey Committee. 9½ in. iv + 318 pp. + (xi) pls. + endpapers. Exeter 1947. Compiled in co-operation with the local authorities, at the suggestion of the Ministry of Town and Country Planning, this volume is mainly the work of the University College Survey Committee set up during the war to prepare the ground for post-war reconstruction. The book's purpose is to assemble information from which detailed planning may be attempted. It contains a number of recommendations of a general nature, in addition to surveys of the geographical, topographical and climatic features of the two counties; of their commercial and industrial resources; of the distribution of population, and of matters affecting employment. There is an excellent index, and a generous supply of maps, diagrams and figures is provided. Those who think statistical tables indigestible will be relieved to find that the pictographic chart method of presentation has been extensively used.

Approach to Better Housing, By *Arnold Waring* [4]. 8½ in. xi + 102 pp. + pls. text illus. Leonard Hill. 1947. 18s. This is quite a little book, and is concerned with the physical aspect of housing—the planning of actual houses and the development of housing estates. It is written with considerable enthusiasm, and the author is evidently keenly interested in his subject.

Apart from 'a brief survey of the past', which is too brief to be of much value, the book is divided into three sections—Estate Development, Housing Design and Construction. It does not make any really fresh contribution to the subject—so many people have worked upon this class of house that it is extremely difficult to say anything new—but it does set out in a very logical way, and in as much detail as is possible in a book of this size, the various factors which must or should be considered in planning a housing estate or a house.

The section on Estate Development is sub-divided into sub-sections dealing with zoning, the neighbourhood unit density, grouping, scenic factors, open spaces, aspect, social amenities and other matters, and these are all briefly considered and suggestions made about them. In the section on House Design there is a sub-section for every room or part of the house.

Most of the views expressed would be fairly generally accepted by those engaged in housing work, and while they are not likely to send anyone off in a new direction, the book is an admirable one for those interested in improving the quality of both houses and estates, but without much knowledge of the subject. It gives a picture of the problems which are encountered and which have to be solved; it is neither too long nor too technical, and it does produce the feeling that 'better housing' is worth some effort.

The illustrations do for the most part illustrate the text, and many of them are very attractive. T. S. BARNES [4]

Floor Finishes. A Guide to their Selection. By *Penelope Whiting*, A.R.I.B.A. Architectural and Building Series. 8½ in. 79 pp. incl. pls. Spon. 1948. 7s. 6d. Here is a most useful little book. The author has succeeded, in the space of some 60 pages, in giving us a comprehensive review of the many types of floor finish now available. The book is divided into a number of sections: Appearance, Cleanliness, Hard Wear, Warmth, Quietness, Effect of Damp and other Influences, and Cost. This sub-division is unusual but logical. The text is reinforced by clear diagrams and photographs, and a comprehensive index.

It is a pity that present conditions have precluded the provision of a more detailed analysis of the cost of the various finishes, for this factor, now more than ever, all too frequently dominates the others. Perhaps it will be possible to include such an analysis in future editions, should prices by then have become more calculable, and less a matter for the crystal ball.

I have only one serious criticism of the book: that is its price. It could deservedly find a place on any architect's or student's bookshelf; but, at 7s. 6d., will it do so? Perhaps, however, I should think again: for after all it is but the price of half a yard of laid linoleum, or just one square foot of marble terrazzo. H. G. GODDARD [F]

An Introduction to Standards in Building, by *D. Dex Harrison*, A.R.I.B.A., A.M.T.P.I. Architectural [and Building] Series. 8½ in. 84 pp. + pls. Spon. 1947. 8s. 6d.

Every architect suffers, almost daily, from standards which know no standard: the standard metal window which spurns the standard brick, and the standard kitchen fittings which, in their turn, spurn both. Those whose work takes them abroad find confusion worse confused.

The author of this book sets out to castigate the upholders of such standardless standards, and presents a logical, well-reasoned case against them. He gives us

also a sound basis on which, in the future, real international standards could be based.

The book is well produced, but it is a pity that the price could not be lower. To achieve its object it must be widely read, not only by members of the architectural and allied professions, but by those many others whose life is in some way affected by those standards, or the lack of them. Some architects will buy it, others will read it in libraries: but I fear that, at the price, it will not achieve the wide circulation it deserves. H. G. GODDARD [F]

Georgian Edinburgh, by *Ian G. Lindsay*. 9 in. × 6½ in. 55 pp. + 24 pls. + 2 folding maps text illus. Edinburgh: Oliver and Boyd. 1948. 7s. 6d.

This slim volume provides, in 55 pages, a brief resumé of the Georgian architecture of Edinburgh, a list of the architects concerned, and a note on the principal buildings.

Such a short essay leaves us little time to dally among the green squares and quadrants of the New Town, and we are sometimes offered tantalising glimpses of their vile and resourceful inhabitants only to be hurried away on our breathtaking tour. The picture, for instance, of 'the magnates of Edinburgh' being pursued from new district to new district by the usurper trading classes, or of the ingenious Jardine who arranged the heating of the Signet Library by hot air exuding from the legs of cast iron tables, opens up rich vistas which are left unexplored.

It is manifestly unfair, however, to criticize this book for not being what it does not pretend to be, and it will serve an excellent and useful purpose as a most readable guide for the interested visitor or as a valuable source of information for the citizen proud of his city.

The numerous photographs illustrate the material very adequately but suffer from a picture postcard-like deadness in the shadows—no doubt as a result of economy in production. The map provided is excellent. R. COWAN [4]

Correspondence

THE U.N. BUILDING

Sir,—I have a great deal of sympathy with the views put forward by Mr. J. J. P. Oud. In my view the finest architecture can not arise from designing in committee, though I would not care to argue that it can not arise from the joint efforts of a firm of architects accustomed to work in unison and harmony.

The U.N. Board of Design was, I feel, a solution to the difficult problem of collaboration between nations. It attempted to go a certain distance, i.e. to find a preliminary planning solution to complex requirements on a difficult site. At the stage when its Report was submitted the plan form and broad geometrical masses of the buildings were alone determined. The model, it may have been noted, showed no final expression of detail. It was, in essence, a developed esquisse for a solution.

I think I am right in saying that the collaborating architects felt that the architectural development of the scheme, and consequently complete freedom to modify the conception as set down in its first broad lines, would become the responsibility—and consequently express the personality—of the chief architect in charge, Mr. Wallace Harrison.

The difficulty about symbolism, and expression generally, is that architects, like painters and sculptors and all artists generally, are seldom agreed on contemporary achievement—a fact which history has so often demonstrated.

Time, and familiarity, are required in order to form a true sense of perspective; few architects today, struggling earnestly and competitively in the contemporary field—or critics, for that matter—are in a strong position to pass an authoritative or irrevocable judgement.—Yours faithfully,

HOWARD ROBERTSON [F]

CENTRAL URBAN OFFICE ACCOMMODATION

Sir,—We were informed last year in the press that the Minister of Town and Country Planning had warmly approved the report of Dr. Holden and Professor Holford on post-war reconstruction in the City of London.

This report recommended a definition of permissible obstruction to light and air as the equivalent of a continuous horizontal sky line subtending an angle of 56 degrees (1½ to 1) as across streets flanked with buildings of regular unbroken heights; but points out that this restriction may be increased by any limitation of the accommodation provided on any single site to approximate to the average pre-war density: a survey of the conditions which obtained in 1939 having proved this to have been quite low.

The City report also described briefly a novel official method of controlling over-building, intended to give designers greater

freedom than is permitted by the customary dimensional restrictions on maximum building, heights and degrees of permissible obstruction. Under this, anything is allowed which permits any obstructed building, actual or potential, to comply with a code of natural lighting defined by the penetration to table height, of a stated value of daylight factor at a given distance back from windows of specified dimensions and distance apart. It was suggested that this indirect system of control by code should only be made obligatory after its advantages had been rendered more familiar by its voluntary adoption by far-seeing ground landlords.

The wisdom of this was amply justified by a subsequent official explanatory article in the JOURNAL of August 1947 which disclosed that compliance with the code required that external obstruction should be reduced from the equivalent of 56 degrees across streets to 35 degrees, or that presented by a typical row of suburban villas.

Even this, startling as it is, may not be impossible on large sites if full advantage is taken of the modern system of 'open planning' coupled with restricted density; but unfortunately the article also disclosed features which clearly imperilled the possibility of administering the code system at all as officially described.

As a recent publication by the Ministry (*) now proposes to make the code compulsory, critical consideration of it has become imperative. Before considering how it can be rendered workable by means of certain modifications, it is essential to remove

(*) *The Redevelopment of Central Areas. Ministry of Town and Country Planning, H.M.S.O. 12s. 6d.*

a material anomaly with regard to restrictions on density. In the approved City report the calculations of permissible office accommodation per unit of site area rightly exclude basements; of which, of course, banks may have two, three or even four. In the Ministry publication local authorities are specifically directed to include them. Which is correct? The answer may in many cases be vitally important. Yours faithfully,

PERCY J. WALDRAM [L]

THREE-STOREY TERRACE HOUSES

Sir,—Mr. J. H. Forshaw in his address to University College, London, mentioned 'Three-storey Terrace Houses' and showed a model and plans of a group on page 292 in the May JOURNAL.

The same arrangement is to be seen in Munster Square, London, but much could be learned about architectural taste and character by comparing the two.

All praise for Mr. Forshaw for vindicating yet another tradition many years forgotten by modern thoughtlessness!—Yours faithfully,

K. G. MILLER [Student]

THE JOURNAL, THE INSTITUTE AND OUR RESPONSIBILITIES

Sir,—The June 1948 JOURNAL struck me particularly as illustrating certain shortcomings in its editing and reflecting indirectly the tepid spirit of some of our gatherings in particular and R.I.B.A. policy in general.

The Editorial hardly seemed to me to be a valuable and terse explanation of Institute policy or a commentary on matters of interest to many of our members. It should more accurately be named Announcements if its present form is to be retained.

The Editor naturally has the unenviable task of printing, and we of contemplating,

speeches that are not infrequently trite, wordy and dull. The June issue, therefore, presumably had to present much of the platitudinous complacency which tends to reduce the level of Conferences. The papers on New Towns and Community Centres were interesting. The discussion on the latter was valuable, although not sufficiently indicative of the fact that most of them exist on paper only.

Too much space was given to matters which do not reflect adequately the problems facing our country and our profession.

The New Schools Exhibition article was pleasing; on the other hand, the lengthy history of the Liverpool Society could well have been conceived so as to give us some information about the effect of the Society on Liverpoolians and its plans for the future.

The material which followed this was almost all very well worth while.

I feel that the JOURNAL and the Institute it speaks for, should show more that they are continuously mindful of the fact that the country as a whole looks to us amongst others for a lead and a policy we can be proud of on matters of national importance. The R.I.B.A. policy on capital cuts for example, seems to me to be the 'purely professional' approach which is not in our long-term interests. We must ensure that the public never comes to regard us in the same way as they seem to regard the B.M.A.

I hope that this broadside will lead to a stream of constructive discussion of the Institute's policy and of the shortcomings of the JOURNAL.—Yours faithfully,

H. DESSAU [A]

Architects' Planning Div. L.C.C., County Hall, S.E.1.

Notes and Notices

NOTICES

Session 1947-48. Minutes XIII

At the Eleventh General Meeting of the Session 1947-48 held on Tuesday 22 June 1948 at 6 p.m.

Sir Lancelot Keay, K.B.E., President, in the Chair.

The meeting was attended by about 150 members and guests.

The Minutes of the One Hundred and Tenth Annual General Meeting held on 3 May 1948 having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President:

AS FELLOWS:

J. H. R. Freeborn, H. S. Gardiner, A. Wollenberg.

AS ASSOCIATES:

Mrs. C. C. Adams, P. T. Barefoot, K. W. Barns, L. W. Batho, R. A. Boxall, K. D. Burbidge, Miss Daphne C. Evans, A. G. Everett, Wilfred Goodey, G. R. E. Griffin, G. H. Gurney, H. S. Haines, W. R. Headley, A. J. Hepworth, E. C. C. Hughes, F. E. Jones, C. W. Kempton, F. H. Larbalestier, Miss M. E. Lavender, S. G. Lawrence, D. H. Marriott, S. B. Marston, M. T. Mitchell, A. H. W. Mold, Miss Jean Pocock, K. J.

Quinn, B. N. Rahalkar, T. L. Rampton, D. O. Searle, B. J. Tancock, Miss B. J. Tavener, J. D. M. Taylor, A. C. Van Raat, Rudolf Waller, A. W. Williams, Neville Woodbury.

AS LICENTIATES:

C. W. Bisping, Bernard Engle, Louis Erdi, G. C. Fox, Wilfred Godwin, C. M. Hannen, Herbert Machin, W. H. Marmorek, J. T. Neville, W. A. J. Spear, R. V. Trigg.

The Secretary having read the report of the Scrutineers on the result of the Annual Election for the Council, the President declared that the members of the Council and the Honorary Auditors for the Session 1948-49 were duly elected in accordance therewith.

On the motion of the President, a vote of thanks was passed by acclamation to the Scrutineers for their labours, and was briefly responded to by Mr. C. J. Epril [F], Chairman of the Scrutineers.

Mr. Charles Woodward [A] and Mr. Sydney E. Redfern, LL.B., then answered a series of questions on 'Practice' submitted by members, and on the motion of the President, a vote of thanks was passed to Mr. Woodward and Mr. Redfern, and was briefly responded to.

The proceedings closed at 7.30 p.m.

Architectural Competitions

Exhibition of Competition Designs

The Council have approved the continuing in force until 1 July 1949 of the footnote to

Clause 8 of the Regulations governing the Promotion and Conduct of Architectural Competitions, by which designs may be exhibited in relays in cases where there are a large number of entries for a competition and accommodation is scarce. The relaxation of the requirements of Clause 8 of the Regulations and Clause 15 of the Model Form of Conditions is continued accordingly, but the Council have added to the footnote permitting this relaxation, a rider that each relay of designs should be exhibited for at least six days

Abandoned Work

The Council have approved the revision of the second paragraph of clause 7 of the Model Form of Conditions so that it shall in future read as follows:

'If, however, within twelve months of the award the author of the selected design is not instructed to proceed with the work for reasons other than those contained in Clause 6, he shall be paid, including the premium, a sum equal to $\frac{1}{2}$ per cent on his estimate of cost up to £100,000 and $\frac{1}{2}$ per cent on any sum in excess of this amount; which sum shall also merge into the commission when the work is subsequently executed.'

Cessation of Membership

Under the provisions of Bye-law 21 the following have ceased to be members of the R.I.B.A.:

As Associates. Leslie Hamilton Kearne, Neil Frederick Perkins.

Building Surveying Examination

The R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 6, 7 and 8 October 1948.

Applications for admission to the Examination must be made not later than 26 August 1948 on the prescribed form to be obtained from the Secretary, R.I.B.A.

Architectural Science Board

British Standard Specifications.

Members of the R.I.B.A. Standard Specifications Committee who wish to bring any particular B.S.S. matter to the attention of the Co-ordinating Committee, are asked to communicate with the Secretary to the A.S.B.

Composition of Subscription for Life Membership

Fellows, Associates and Licentiates of the R.I.B.A. may become life members by compounding their respective annual subscriptions. Full details may be obtained on application to the Secretary, R.I.B.A.

Correspondence with the Institute

In order to facilitate speedier attention to correspondence, and to relieve the staff of a great deal of research, it is particularly requested that members and students will kindly state in all correspondence with the Institute the class of membership (F, A, L or Student) to which they belong.

R.I.B.A. Distinction in Town Planning

The award of the R.I.B.A. Distinction in Town Planning, taking effect from 1 June 1947, is by conferment instead of by examination and limited to Fellows, Associates and Licentiates of the R.I.B.A.

The Distinction is the highest award in Town and Country Planning that the R.I.B.A. can bestow. It is primarily for members of the R.I.B.A. who have made some contribution in the field of large scale planning, especially in visual and three-dimensional planning which is so vital in the development schemes that will take place throughout the country.

Recommendations will be submitted to the Council by a standing committee to be set up for the purpose. The title of the award and the affix denoting it will remain unchanged.

Personal applications by candidates will not be entertained: the name of a candidate must be submitted by three sponsors, themselves members of the R.I.B.A., who will be required to submit the following particulars on behalf of the candidate: (a) details of professional qualifications and experience; (b) evidence of his work and achievements in the field of town and country planning, including three-dimensional planning; such evidence to consist of a list of the candidate's work together with references to professional journals in which the works have been illustrated; and such other evidence as may assist the committee in making their recommendation to the Council.

No fee will be required from the candidate. Those members who have already been awarded the Distinction will retain it and any present candidates for the examination for the Distinction under the previous procedure will be dealt with by the panel of examiners under that procedure.

New Building Materials and Preparations

The attention of members is drawn to the fact that information in the records of the Building Research Station, Garston, Watford, Herts, is freely available to any member of the architectural profession, and architects would be well advised when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

COMPETITIONS

International Town Planning Competition

Stockholm's Town Planning Board invites experts of all countries to take part in a competition in connection with a new main artery between the districts of Södermalm and Östermalm (Norra Djurgården) via Södra Djurgården.

Assessors:

The commissioner for the town planning department, Helge Berglund, chairman.

Professor Sir Patrick Abercrombie [F].

Hakon Ahlberg, architect.

Anders Ahlén, civil engineer.

David Anger, civil engineer.

Professor Anker Englund.

The commissioner for the harbour department, Harald Göransson.

Hans von Heland, assistant city treasurer.

Sven Markelius, city planning director.

Ernst Sundström, civil engineer.

Gunnar Wetterling, city architect.

Premiums:

The jury have at their disposal the sum of 60,000 Swedish crowns. Of this, 48,000 crowns shall be awarded in prizes, and 12,000 crowns used for purchasing proposals. Four prizes shall be awarded. Unless a unanimous jury decide to the contrary, the first prize shall be 20,000 crowns.

The lowest prize shall not be less than 6,000 crowns, nor the lowest purchasing price less than 3,500 crowns. Winning entries, or proposals purchased, become the property of Stockholm City, without further compensation. Last day for submitting designs: 1 April 1949.

Conditions may be obtained from Tävlingsskaffningen, Stockholm stads stadsplanekontor, Stadshuset, Stockholm.

Deposit: 100 Swedish crowns.

BOARD OF ARCHITECTURAL EDUCATION

Leverhulme Scholarship in Architecture 1948

The Leverhulme Scholarship, tenable at the Architectural Association School of Architecture, London, value £1,000, which includes payment of fees and maintenance for five years, has been awarded this year to Mr. R. A. Maguire, of Queen's Park, London (and Bancroft's School, Essex).

Prizes and Studentships—The Ashpitel Prize, 1947

The Ashpitel Prize has been awarded to Miss Frances E. Allen [A]. The Prize consists of books to the value of £20. It is awarded to the candidate who most highly distinguishes himself or herself in the R.I.B.A. Final Examinations of the year.

R.I.B.A. Intermediate Examination.—May 1948.

The questions set at the Intermediate Examination held in May 1948, have been published and are on sale at the Royal Institute, price 1s. (exclusive of postage).

ALLIED SOCIETIES

Changes of Officers and Addresses

Northern Architectural Association. President, Mr. F. A. Child [F], 25 New Bridge Street, Newcastle-on-Tyne 1.

Northern Architectural Association, Tees-Side Branch. Hon. Secretary, Miss Mabel Thompson, c/o Borough Architect's Department, 124 High Street, Stockton-on-Tees.

Sheffield, South Yorkshire and District Society of Architects and Surveyors. President, Mr. C. S. Sandford, F.R.I.C.S.

East Africa Institute of Architects. Hon. Secretary and Treasurer, Miss Helga Richards, P.O. Box No. 866, Nairobi, Kenya.

The Institute of South African Architects—Natal Provincial Institute of Architects. President, Mr. L. C. Lambert [A], c/o City Engineer's Dept., P.O. Box 680, Durban. Secretary, Mr. A. Morrison, 69 Poynton's Chambers, 339 Smith Street, Durban.

Royal Architectural Institute of Canada. President, Mr. A. J. Hazelgrove, Room 205, 74 King Street East, Toronto, Ontario. Hon. Secretary, Mr. James H. Craig.

The Suffolk Association of Architects. Hon. Secretary, Mr. L. J. Grigg [A], County Architect's Dept., County Hall, Ipswich.

West Yorkshire Society of Architects. Halifax Branch. President, Mr. William Hall [L] 10 Commercial Street, Halifax.

Royal Architectural Institute of Canada—Ontario Association of Architects. Office removed from 74 King Street East to 1323 Bay Street, Toronto, Ontario, Canada.

South-Eastern Society of Architects. President, Mr. Arthur J. Stedman [F], F.R.I.C.S.

Wessex Society of Architects—Bristol Society of Architects. President, Mr. R. S. Redwood [A], 19 Woodland Road, Bristol 8. Hon. Secretary, Mr. A. H. Clarke [A], 'Ripplestone', Walton-in-Gordano, near Clevedon, Somerset.

Annual General Meeting of the Royal Society of Ulster Architects

This was held at 7 College Square North, Belfast, on Thursday 27 May 1948, and the following elections took place: President, A. F. Lucy; Vice-President, V. Smyth [A]; Hon. Treasurer, F. McArdle, M.Sc. [F]; Hon. Secretary, A. Neill [A]; Members of Council, J. M. Aitken [A], R. H. Gibson [F], J. H. Stevenson [F], R. H. Bell [A], T. R. Eagar [F], H. W. Scatchard [A], W. M. Gamble, G. W. Reside, B.Sc., M.B.E., J. D. McCutcheon, W. H. D. McCormick [A].

In his presidential address Mr. Lucy referred to the good relations which existed between the profession and the various Government Departments with which architects were in daily contact, and he said that the slight relaxation of the restrictions on the issue of building licences was welcomed by all concerned. He then referred to the rebuilding of churches, and said that he hoped the supply position would improve sufficiently to permit this work to be carried out. Mr. Lucy went on to speak about the increasing popularity of architectural competitions, and he felt sure that this policy would result in the erection of finer buildings.

The President then stated that mutual benefits were now being derived from the Joint Committee of the Royal Society of Ulster Architects and the Royal Institute of the Architects of Ireland, which was set up about two years ago to consider matters of common professional interest.

Mr. Lucy said that it had caused great satisfaction to the Senior Council to find that the Junior Branch had made so much progress, and the lectures and competitions which they had organized during the year had been a source of great encouragement to the younger members studying for their examinations.

In conclusion the President referred to the co-operation between the Society and the parent body, the R.I.B.A.

The Royal Incorporation of Architects in Scotland

The 1948 Convention took place in Aberdeen on 4 and 5 June. The proceedings opened with the Annual General Meeting in the Art Gallery, School Hill. There was a record attendance of over 90 members from all Chapters.

The R.I.B.A. President and Secretary were present, and were welcomed by the President.

Mr. A. G. R. Mackenzie [F] (Aberdeen) was re-elected President for the ensuing year, and Messrs. J. R. McKay, D. Ross and A. N. Malcolm were elected Incorporation Representatives. On the recommendation of the Aberdeen Chapter, Dr. W. Douglas Simpson, Librarian, Clerk and Registrar of the General Council of the University of Aberdeen, and on the recommendation of the Edinburgh Chapter, Sir John I. Falconer, W.S., Edinburgh, a former Edinburgh Lord Provost, were elected Honorary Fellows. The meeting agreed to increase the dues payable by members as from 1 January 1949. It was agreed to hold the Annual Convention for 1949 within the area of the Dundee Chapter.

After the taking of the Convention photograph, a Civic Welcome was given by Lord Provost Duncan Fraser and the Magistrates in the Art Gallery, following which members were the guests at tea of the Aberdeen Corporation. Those present saw on exhibition a selection of the work of students of the Aberdeen School of Architecture.

The Annual Dinner was held in the Northern Hotel. Among those present were the Lord Provost of Aberdeen and Mrs. Fraser, Sir James Burnett of Leys and Lady Burnett, Mr. and Mrs. Rust, Dr. W. Douglas Simpson, Sir Lancelot and Lady Keay, the Presidents of the Scottish National Building Trades' Federation (Employers), and the Scottish Branch of the Royal Institution of Surveyors. A toast, 'The Architectural Profession', was proposed by the Lord Provost, who referred to the serious responsibility which architects have for rebuilding the broken world. He was confident they would fulfil their duties. They had done great work in the past, and could do greater. Replying, Sir Lancelot Keay, K.B.E., hoped the profession would soon get a fair opportunity to show its ability. There was at present a tendency to restrict and control the freedom of all, particularly of the architect. There was also a move towards centralization, but it was his experience that the Local Authorities were not those responsible for this move. He was naturally anxious about the future, but reminded those present of the stimulating effect of hard work. He felt that if every person did his best, the profession would achieve much. The President, R.I.A.S., replied to the toast. The toast of the Guests was proposed on the call of Mr. T. F. MacLennan, and Sir James Burnett of Leys replied.

After dinner a dance was held; the numbers were increased by Student members and their guests. At 7.30 a.m. the following morning a small party under the guidance of the Aberdeen Chapter President visited the Fish Market and were conducted round the early fish sales and were very interested in the hive of activity at that famous place.

Four alternative tours had been arranged for the following day. The first of these was to the granite industry. Visits being made to the Rubislaw Quarries and to the Frogghall Granite works. Rubislaw Quarry, 430 ft. deep, was an awe-inspiring sight to visitors, and the methods of splitting and blocking the stones were demonstrated. At Messrs. McDonald's works the party examined a wide variety of cutting, dressing and polishing machines of the most modern types.

A second tour was to the Grandholm Works, at Woodside, of Messrs. J. & J. Crombie Ltd., Woollen Manufacturers.

Some of the old buildings of architectural interest in Aberdeen comprised the third tour, the party being assisted in their appreciation of these buildings by Dr. W. Douglas Simpson, acting as guide. The fourth tour was to some of the buildings recently erected in Aberdeen.

The whole company was then entertained to lunch at the Northern Hotel as guests of the Aberdeen Chapter under the Chairmanship of Mr. G. Angus Mitchell, who referred to the pleasure it had given the Aberdeen Society of Architects to have had the Convention in their area that year, the 50th year of their Society. Mr. C. D. Spragg, Secretary, R.I.B.A., thanked the Aberdeen Society for their hospitality and their Committee for the excellence of all their arrangements. Mr. L. W. Hutson, supplementing Mr. Spragg's remarks, referred to the difficulty which other Chapters would have in maintaining the high standard set by their Aberdeen friends.

In the afternoon, in perfect weather, the company travelled through glorious Deeside to Crathes Castle, the ancestral home of Sir James Burnett of Leys, where the history and features of the building were explained by Dr. W. Douglas Simpson. Tea was served at Raemoir Hotel, Banchoy.

Next year's Convention will be held in June.

South-Eastern Society of Architects—Annual General Meeting

This was held at 66 Portland Place, W.1, on 29 June, and was well attended by just under 50 members. Mr. A. J. Stedman [F] was elected President for the ensuing year, and Messrs. R. Duncan Scott [F] (Guildford), W. J. Thrasher [A] (Brighton), F. A. Perren [F] (Canterbury), C. S. Spackman [L] (Croydon), Norman Haines [L] (Kingston), and Mr. C. J. Cable [F] (Canterbury) were elected Vice-Presidents. Mr. Cecil Burns [F] (Tunbridge Wells) and Mr. C. H. Murray [F] (Eastbourne) were re-elected Hon. Treasurer and Hon. Secretary respectively. With the approval of the R.I.B.A., a new Chapter centred on Kingston-upon-Thames, formerly included in the Guildford Chapter, was formed.

The Financial Report showed a sound position in the Society's affairs, and £50 was voted to the Lovell Memorial Trust Suspense Account for educational purposes. Mr. Harold Anderson [F] (Canterbury), the retiring President, voiced a cautious optimism in his Report upon future prospects, which appeared to be shared by the meeting. The Society plans a full programme of activity in the coming session.

GENERAL NOTES

Cricket—R.I.B.A. v. A.A.

The A.A. avenged their defeat last year by winning, though narrowly, their annual match against the R.I.B.A. Held at Elstree on 23 June on a glorious day, perfect for cricket, the match was in doubt from the first half hour up to the last few minutes. The R.I.B.A. began badly, but a stand by Fairbairn and Bynoe (who hit one glorious six) made the score look much healthier when lunch was taken. After lunch, however, the last three wickets went down like ninepins (one wonders why!). The R.I.B.A. achieved the moderately satisfactory total of 76 against good bowling by Davies and Douglas.

When Whichelow, last year's top scorer for the A.A., went for a duck, the R.I.B.A. team felt they had started well. Two more wickets fell quickly, and all seemed set for another R.I.B.A. victory. However, against skilful bowling changes and subtle placing of the field by Taylor, the R.I.B.A. captain, the score was slowly brought up to a respectable figure by Davison, Cooper and Douglas. The latter partnership was broken by a cunning leg trap, Douglas falling to a simple catch by Norton at short leg off the slow leg breaks of Luck. Five minutes later Davies fell neatly into the

same trap. Tea was taken with the score at 66 for 7 wickets, and victory for the A.A. seemed in sight. Then came two quick wickets to Norton and the field closed expectantly on Stevens, the last batsman. But he was not perturbed and, playing steadily with his captain, Ballantyne, helped with a useful 11 to bring the score to 85 before Norton uprooted his middle stump. Score:

<i>R.I.B.A.</i>	
A. Marlow lbw b Treweek	9
F. Napp b Davies	1
C. A. R. Norton c Douglas b Ballantyne	11
D. Levinson b Davies	2
L. E. Luck c Cooper b Douglas	0
D. S. Taylor (captain) lbw b Douglas	0
R. R. Fairbairn b Douglas	21
P. Bynoe b Davies	25
C. R. Turnor c Douglas b Cadd	4
W. W. Atkinson b Douglas	0
J. S. Hirst not out	0
Extras	3
Total	76

Bowling

Davies 3—17, Treweek 1—13, Douglas 4—8, Ballantyne 1—15, Cooper 0—20, Cadd 1—0.

Architectural Association

N. A. P. Whichelow	0
P. R. Davison b Bynoe	14
P. W. Verrall b Bynoe	5
B. Cadd b Norton	2
F. C. Cooper b Luck	16
A. Douglas c Norton b Luck	22
D. C. Davies c Norton b Luck	4
B. N. Atkinson c Taylor b Norton	1
A. R. Ballantyne (captain) not out	6
J. N. Treweek lbw b Norton	0
J. A. Stevens b Norton	11
Extras	4
	85

Bowling

P. Bynoe 3—30, Norton 4—30, Luck 3—9, Levinson 0—12.

R.I.B.A. Golfing Society

A meeting of the Society was held at Denham Golf Club on 30 June. The weather was good and members spent a most enjoyable day playing for the Captain's Cup and Prize in the morning, and the Society's Prize in the afternoon four-ball competition.

Results were:

The Captain's Cup and Prize: W. R. F. Fisher 82—9=73.

Runner-up: John Grey 91—11=80.

Four-ball Bogey Competition: H. St. J. Harrison and E. H. Firmin, W. R. F. Fisher and H. Marsh—All square.

Two further meetings are being arranged for this year. The Hon. Sec., E. H. Firmin, 111 Park Street, W.1 (Tel.: Mayfair 8240), will be glad to hear from any Members or Students of the R.I.B.A. interested in joining the Society.

R.I.B.A. Golfing Society v. L.M.B.A. Golfing Society—At Hendon Golf Course, 8 June

Singles—Note L.M.B.A. players given first. Handicaps given in brackets.

M. A. Wiggs (3) lost to Felix Wilson (6) by 5 and 4, F. R. Clemens (6) lost to E. H. Firmin (6) by 5 and 3, S. Marshall Andrew (7) beat Sir Giles Gilbert Scott (8) by 4 and 3, J. Walker (10) lost to H. St. J. Harrison (10) by 2 up, R. E. Mabey (11) beat A. H. Watkins (10) by 4 and 3, H. B. Kerr (13) lost to John Grey (13) by 6 and 5, E. K. V. Dakin (12) lost to W. R. F. Fisher (9) by 3 and 1, P. H. Bates (6) lost to T. H. Townsend (9) by 1 up, D. F. Cox (7) lost to A. D. McGill (7) by 1 up, R. E. Aris (11) lost to H. Marsh (10) by 3 and 2, L. Dobbs (12)

lost to H. L. Bloomfield (12) by 4 and 2, A. J. Bates (12) lost to J. Gilchrist Wilson (12) by 2 and 1, P. B. Prowling (12) beat H. Neville Bomer (15) by 7 and 6, C. A. Hill (13) and A. V. Farrier (20) halved. Totals: L.M.B.A. 3½, R.I.B.A. 10½.

Four Balls

Marshall Andrew and Clemens beat Scott and Firmin by 3 and 2, Kerr and Cox lost to Grey and McGill by 6 and 5, Walker and Dakin beat Fisher and Harrison by 2 and 1, A. J. Bates and Aris beat Marsh and J. G. Wilson by 4 and 3, P. H. Bates and Dobbs beat Townsend and Bloomfield by 2 up, Wiggs and Mabey beat F. Wilson and Watkins by 3 and 2, Prowling and Hill lost to Bomer and Farrier by 2 and 1. Totals: L.M.B.A. 5, R.I.B.A. 2.

Result: L.M.B.A. 8½ matches, R.I.B.A. 12½ matches.

Architectural Association Prizes and Scholarships Awards

First Year Prizes: Howard Colls Travelling Studentship (value £15 15s.); T. G. Bidwell; **Second Prize** (Books, value £5 5s.): Andrew Derbyshire. **Second Year Prizes:** A.A. Trav-

elling Studentship (value £26 5s.): R. E. Wilkinson; **Second Prize** (Books, value £10 10s.): B. C. Cassidy. **Third Year Prizes:** Holloway Scholarship, tenable for the senior course (value £150): H. S. Morel; **Third Year Travelling Studentship** (value £31 10s.): H. C. Morris; **Third Year Prize** (Books, value £10 10s.): Miss S. C. Gibson. **Fourth Year Prizes:** Year Prize (Books, value £10 10s.): I. D. Grant; R.I.B.A. Henry Jarvis Scholarship for Construction (value £50): P. A. Newnham. **Fifth Year Prizes:** Henry Florence Travelling Studentship (value £50): P. A. R. Dickinson; **Fifth Year Travelling Studentship** (value £50): M. G. F. Ventris; **Medal** presented annually by the Société des Architectes Diplômés par le Gouvernement, Paris, to the best Diploma student of the Session: Miss N. Dore; **Third Prize** (Books, value £10 10s.): Oliver J. Cox. **Alec Stanhope Forbes Prize** (for the best colour work during the session) (Books, value £5): B. A. Barker. **Roland Wilmot Paul Prize**, 1948 (value £30): P. H. Bosanquet. **A.A. Measured Drawings Prize** (value £20): divided equally between Miss S. C. Gibson and W. J. Appleton. **Royal West of England Academy School of Architecture** (affiliated to the A.A.): The Prize

in Design (value £5 5s.) is awarded to D. Morris (3 gns.), G. P. Treglown (2 gns.).

During the session the following awards were announced: **Leverhulme Scholarship** (value £1,000): R. A. Maguire (Bancrofts) *The Minter Open Entrance Scholarship* (value £100): G. W. Ripley (Bryanston). *The Sir Walter Lawrence Open Entrance Scholarship* (value £100): Miss K. Cholerton (Badminton). *The Metal Window Scholarship* (presented by the British Metal Window Manufacturers' Association Ltd.) (value £75): M. Cain (Emanuel School). *The Natural Asphalte Council Scholarship* (presented by the Natural Asphalte Mine-owners and Manufacturers' Council) (value £50): C. E. Bagwell-Purefoy (Bradfield). *The Northern Aluminium Scholarship* (presented by the Northern Aluminium Company) (value £50): awarded to R. A. Maguire but transferred to D. A. Sayers. *The Patent Glazing Scholarship* (presented by the Patent Glazing Conference) (value £50): R. G. Talbot Kelly (Rugby). *The Metal Window Senior Scholarship* (presented by the British Metal Window Manufacturers' Association Limited) (value £50): D. J. Dupree (Northern Polytechnic School of Architecture).

Notes from the Minutes of the Council

MEETING HELD 22 JUNE 1948

Birthday Honours

The congratulations of the Council have been conveyed to members who received the following awards in the Birthday Honours List: C.M.G.; Mr. L. Laybourne-Smith [F]; C.B.E.; Mr. Graham R. Dawbarn [F]; O.B.E.; Mr. Frank C. Haslam [F] and Mr. Harry Kendall [A]; M.B.E.; Mr. C. O. Jennings [A]; I.S.O.; Mr. J. A. Bessant [A].

Appointments

(A) **Ministry of Works Working Party on Building Operations:** R.I.B.A. 'Assessor': Sir Lancelot Keay.

(B) **Ministry of Works Committee on Standardisation of Materials for School Buildings:** R.I.B.A. Representative: Mr. Denis Clarke Hall [F], in place of Mr. P. W. Hubbard [F].

(C) **Ministry of Works:** R.I.B.A. Representative on Sub-Committee to consider future of Codes of Practice Committee: Mr. Stanley Heaps [F].

(D) **Court of Sheffield University:** R.I.B.A. Representative: Mr. H. B. S. Gibbs [F] (re-appointed).

(E) **Town Planning Institute:** Rees Jeffreys Lectures: R.I.B.A. Representative on Committee to arrange triennial lecture on Road Design and Layout: Mr. Richard Nickson [F]. **British Architects' Conference 1948 Liverpool:** A hearty vote of thanks was passed in favour of the President and Council of the Liverpool Architectural Society and all those who had offered hospitality and contributed to the success of the recent conference at Liverpool.

Vote of Thanks to the President: On the proposition of Mr. Michael Waterhouse, President-elect, a vote of appreciation of, and thanks for his valuable work during his two years of office as President was passed in favour of Sir Lancelot Keay.

Gift of £100 by the New Zealand Institute of Architects: The Secretary reported that a gift of £100 had been received from the New Zealand Institute of Architects to be devoted to the relief of cases of hardship amongst members or their dependants.

It was agreed to hand this gift to the Architects' Benevolent Society to administer if the New Zealand Institute were agreeable, and a very hearty vote of thanks for their generosity was passed in favour of the New Zealand Institute of Architects.

Chair of Architecture: University of Sheffield: The congratulations of the Council have been conveyed to Professor Stephen Welsh [F] on his appointment to the newly created Chair of Architecture in Sheffield University.

London Architecture Bronze Medal: The Council approved the recommendation of the jury that the award of the London Architecture Bronze Medal be deferred for twelve months.

R.I.B.A. Architecture Bronze Medal: The Western Australian Chapter of the Royal Australian Institute of Architects: The Council noted that the Western Australian Chapter had approved the recommendation of the jury that no award be made for the period 1936-46. **The South-Eastern Society of Architects: Formation of Kingston-upon-Thames Chapter:** The Council approved the proposal of the South-Eastern Society of Architects to form a Chapter of the Society at Kingston-upon-Thames.

Provisional Programme of Exhibitions: The following programme of exhibitions was approved for the Session 1948-49:

Spring or Early Summer 1949: An exhibition on 'The Architect and Industry'.

Autumn 1949: An exhibition of Danish architecture.

Spring or Early Summer 1950: An exhibition and conference on hospitals.

During 1950: An exhibition of American architecture.

Competitions

(A) On the recommendation of the Competitions Committee the following amendment to the second paragraph of Clause 7 of the Model Form of Conditions was approved: To read: 'If, however, within twelve months of the award the author of the selected design is not instructed to proceed with the work. . . .'

(B) On the recommendation of the Competitions Committee the Council approved the continuance of the relaxation as to the exhibition of competition designs as set out in the footnote to Clause 8 of the Regulations for the Promotion and Conduct of Architectural Competitions for a further twelve months and added to the text of the note that: 'Where there is insufficient accommodation to show all the designs at one time it is suggested that they should be shown in relays for at least six days'.

Membership: The following members were elected: as Fellows, 16; as Associates, 43; as Licentiates, 15. Students: 98 Probationers were elected as Students.

Applications for Election: Applications for election were approved as follows: *Election 9 November 1948: (Overseas Candidates)* as Fellows, 2; as Associates, 3.

Applications for Reinstatement: The following application was approved: as Associate: Charles Herbert Bingham-Powell.

Resignations: The following resignations were accepted with regret: William James Marmaduke Morrish [F], James Henry Puntin [F], Frederick John Stevens [A], Robert Albert Walter [A], George Herbert Kitchin [L], Louis Norman Sanderson [L].

Applications for Transfer to Retired Members' Class under Bye-law 15: The following applications were approved: as Retired Licentiates: Bernard Leigh Newman, Percy John Waldram.

Obituary: The Secretary reported with regret the death of the following members: Dr. Peter Behrens (Hon. Corresponding Member), Dr. Josef Strzygowski (Hon. Corresponding Member), Norman Henry Atkins [F], George Philip Banyard [F], Sir Francis Minshull Elgodd, C.B.E. [F]. Sir Francis Elgodd was a former member of the Town Planning and Housing Committee. Lionel Upperton Grace [F]. Mr. Grace was Grissell Gold Medallist 1902. Rob Allsebrook Hinds [F], Richard Holt [F], Brigadier General Arthur Benison Hubback, C.M.G., D.S.O. [F], George Alfred Humphreys, J.P., R.I.B.A. Distinction in Town Planning [F]. Mr. Humphreys was a former President of the North Wales Architectural Society and had represented that body on the Allied Societies' Conference. Frederic William Lawrence [F], Basil Oliver, F.S.A. [F], Mr. Oliver was awarded the R.I.B.A. Architecture Bronze Medal for Essex, Cambridge and Hertfordshire 1928. He was a former member of the Literature Standing Committee and the Board of Architectural Education. Johannes Schreiner [F], Henry Charles Smart [F], Thomas Retford Somerford [F], Clyde Young [F], Samuel Edwin Cook [Retd. F], Thomas Phillips Figgis [Retd. F], John Kirkland, O.B.E. [Retd. F], Percy Sidney Dixon [A], George Henry Gordon Marriott [A], Roger Liddesdale Palmer, M.C. [A], Archibald Pursglove [A], Edward James Harris [L], William Charles Inman [L], Walter Green (Student).

Review of Films—4

The country of origin and date of release are given first. The film is in monochrome unless otherwise stated. The sizes (35 mm. and 16 mm) are given. Sound films are marked 'sd.', and silent 'st.'. The running time is given in minutes. (F) indicates free distribution. (H) indicates that a hiring fee is payable.

Homes for All

Britain 1946 (H).

Summary. This film traces the story of Britain's housing problems from the time of the Industrial Revolution to the present day. The lack of planning in the 19th century and the effects of bye-law regulations are shown. Later garden suburbs provided better accommodation for workers, but much time was lost in travel and social amenities were often overlooked. The inter-war years produced much 'jerry' building and ribbon development. After the second world war a temporary housing programme was introduced to meet, in part, the crying need for houses. With the passing of the Town and Country Planning Acts new powers were vested in the Ministry of Town and Country Planning, and long-term planning was initiated. Because of the shortage, materials were controlled and a great deal of research

took place resulting in the development of many new forms of non-traditional building.

Appraisal. A good documentary film with a slight political bias. The approach to the subject is conventional in places, though, on the whole, the story is well told and comes across. The photography and commentary are adequate. The film would form a good background to the subject for general audiences, but would have little appeal for architectural or planning audiences.

16 sd. 20 minutes. Can be hired from Gaumont British Film Library, Aintree Road, Perivale, Middlesex. (Reference No. C. 940).

The Gothic Arch

Britain 1947 (H).

Summary. This film shows by means of simple diagrams as well as photography the development of the Gothic Arch and its place in Gothic Architecture.

Appraisal. An interesting idea, rather poorly presented. With more expert production this could have been made into a good film of the right length. In parts good use is made of the diagrammatic form of presentation, but the captions seem a little inadequate, although teaching notes are available for use with the film. Full use should be made of these where the film is used for teaching young children.

16 st. 8 minutes. Can be hired from Gateway Film Productions, 84 Powys Lane, Palmers Green, N.13.

New Town

Britain 1948 (F).

Summary. A cartoon film about the theory of town planning. Commencing with the defects of unplanned towns, the film goes on to explain the urgent need for correct siting, open spaces, proper amenities, and the provision of different types of domestic dwellings. The subject is introduced and explained by a cheerful character known as Charlie, who compares the discomforts of an unplanned town with the benefits of planned community life.

Appraisal. Made for the Ministry of Town and Country Planning to interest general audiences in the planning of our New Towns. The film has considerable entertainment value, and is well conceived and executed, the commentary is clear and lively. The novel form of technique coupled with an imaginative approach to the subject should help to convey to general audiences the broad principles of town planning.

35 sd. 16 sd. 10 minutes. Can be hired from the Central Film Library, Imperial Institute, South Kensington, S.W.7. (Reference No. U.K. 890.)

Membership Lists

ELECTION: 22 JUNE 1948

The following candidates for membership were elected on 22 June 1948:

AS FELLOWS (16)

Brown: Francis Humfrey, M.A. [A 1937], Chester.
Child: Frederick Austin, A.M.T.P.I. [A 1921], Newcastle-on-Tyne.
Farrar: Edgar, Dip. Arch. (L'pool) [A 1934], Hull.
Moline: Geoffrey Lewis [A 1937], Sydney, N.S.W.
Moore: Harold William [A 1931].
Varcoe: Leo Cyril Francis [A 1928].
And the following Licentiate who have passed the qualifying Examination:
Caspari: Peter.
Chalmers: Alan Cyril.
Day: Frank Reginald.
Entwistle: Clive Ernest.
Frankel: Rudolf.
Lester: Peter Frank, Khartoum, Sudan.
Pennells: Bernard Field, M.B.E., Worthing.
Pyman: Noel, Leeds.
Quarmby: John Varley, Southsea.
Williams: Laurence, Coventry.

AS ASSOCIATES (43)

Austin: Ernest Harry Wesley, Stourbridge.
Axtell: Elaine (Miss), Cambridge.
Baron: John Michael, Nottingham.
Bird: Kenneth John, Norwich.
Blockley: Leonard Hamilton, Nottingham.
Bordoli: Maurice Roy, Nairobi, Kenya.
Boutell: Leonard Jonathan, Ramsey, nr. Harwich.
Brown: James Charles, Rugby.
Collings: Vivian George, Truro.
Couper: Norman Douglas, Inverberrie, Kincardineshire.
Crompton: Mary Estelle (Miss), B.Arch. (L'pool).
Duncan: Scott, Edinburgh.
Findlay: James Robert.
Fooks: Dr. Ernest Leslie, Elwood, S.3, Victoria, Australia.

Fussell: Cyril James, Newport, Mon.
Gregory: Terence Wyatt, Wolverhampton.
Grice: John Michael, A.A. Dip.
Hope: Helen Elizabeth (Miss).
Jacob: Christopher Harvey, Dublin.
Kirkham: John Kenneth, Torquay.
Macgregor: Penelope Anne Udale (Miss).
Marchant: George William [L], Bristol.
Mealand: Alfred, Brisbane, Queensland.
Mercer: Ursula Margaret (Miss), B.Arch. (L'pool), Stoke-on-Trent.
Milligan: Stephen Glyndwr Vaughan, Coventry.
Osborne: John Lander, Lt.-Col. M.B.E., R.E., Birmingham.
Parr: Barbara Mary (Miss), St. Albans.
Percy: Douglas, Billericay.
Saksena: Urmila Eulie (Miss), New Delhi, India.
Selley: Frederick Arthur Mountford.
Shanks: Donald Allen, Lewes.
Slade: Charles Kenneth, Chorley Wood.
Soulsby: John Peter Frederick, Hull.
Suter: Ronald Edwin, Watford.
Turner-Smith: Colin Ernest, Coulsdon.
Underwood: Sidney.
Wallace: Thomas Highet, Kilwinning, Ayrshire.
Whiting: Thomas Courtney, Bexhill.
Wilson: James Alison.
Wilson: Robert Gray Boone, Bulawayo, Southern Rhodesia.
Wood: Henry Sinclair, Dip. Arch. (Edin.), Dip. T. & C.P. (Edin.), Edinburgh.
Wood: Reginald Alfred, Croydon.
Woods: Alan, Oxford.

AS LICENTIATES (15)

Barclay: William, Leith.
Fogden: John, Plymouth.
Idle: Philip George, Major, R.E., Aldershot.
Korn: Arthur.
Main: Gerald Eric, Grange-over-Sands.
Minett: Charles William.
Paquay: Albert Francois, Oxford.
Parker: Stanley.
Peck: John Henry.
Smith: William Hill, Glasgow.
Steven: David.
Walker: Brenda Emily Janie (Miss), Broadstairs.

Wilcox: Joseph William, A.M.T.P.I., Long Eaton.
Williams: Owen Pasley Denny, Cambridge.
Woodman: Dudley Francis.

ELECTION: 9 NOVEMBER 1948

An election of candidates for membership will take place on 9 November 1948. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 23 October 1948.

The names following the applicant's address are those of his proposers.

AS FELLOWS (2)

Moore: John Drummond Macpherson [A 1920], 5 O'Connell Street, Sydney, New South Wales; 14 Giviller Avenue, Vaucluse, New South Wales. J. C. Fowell, B. J. Waterhouse, Prof. Leslie Wilkinson.

Thompson: Eric Lindsay, B.Arch. (Sydney) [A 1931], 56 Hunter Street, Sydney, New South Wales; 1 Narrelle Avenue, Pymble, New South Wales. Prof. Leslie Wilkinson, W. R. Richardson, and B. J. Waterhouse.

AS ASSOCIATES (3)

Cozens: Arthur Wilson (Passed a qualifying Exam. approved by the R.A.I.A.), 2b Castle-reagh Street, Sydney, New South Wales; Prof. Leslie Wilkinson, J. C. Fowell, B. J. Waterhouse.

Neave: George Greig Grant (Passed a qualifying Exam. approved by the R.A.I.A.), 14 Waruda Street, Kirribilli, Sydney, New South Wales; F. G. Costello, B. J. Waterhouse, J. L. Mansfield.

Turner: Frederick John Newton, B.Arch. (Sydney) (Passed a qualifying Exam. approved by the R.A.I.A.), c/o Messrs. Robertson and Marks, 9-11 Castlereagh Street, Sydney, New South Wales; Prof. A. S. Hook, J. C. Fowell, W. R. Richardson.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant, or wanted, practices for sale or wanted, office accommodation, and personal notices other than for posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. Guy Aldis [A], formerly a partner in the firm of **Geoffrey Bazeley and Partners**, of 15/16 Alverton, Penzance, has been appointed Architect to the East Anglian Regional Hospital Board. His address will be 117 Chesterton Road, Cambridge, to which all future communications should be sent. Trade catalogues, etc., will be welcomed.

Mr. J. H. Beers [A], having taken up a Colonial Office appointment with the Public Works Department, Mombasa, Kenya, will be pleased to receive trade catalogues, etc., at P.O. Box 50, Mombasa, Kenya, East Africa.

Mr. T. A. L. Concannon [F], of the Colonial Service, has been seconded for duty with the Government of North Borneo. He will be pleased to receive trade catalogues, etc., c/o Secretariat, Jesselton, North Borneo.

Mr. R. Jackson, M.B.E. [F], has relinquished his appointment as Senior Architect, G.H.Q., M.E.L.F. His future address for correspondence is c/o National Provincial Bank, Charminster Road, Bournemouth.

Mr. J. D. Tetlow [A], formerly of the staff of the Ministry of Town and Country Planning, London Region, has now taken up appointment as Area Planning Officer, Eastern Area, Staffordshire County Council. His address is Quarry Lodge, Tamworth Road, Lichfield.

Mr. Owen N. Roberts [A] has been appointed Senior Planning Assistant to the Buckinghamshire County Council, and will be pleased to receive trade catalogues, etc., addressed to him at County Planning Dept., County Offices, Aylesbury, Bucks.

Mr. E. L. G. Scriven [L], of 'Fairfield', 1 Ranelagh Street, Hereford, has been appointed Diocesan Surveyor for the Ludlow Archdeaconry by the Hereford Diocesan Dilapidations Board. Mr. Scriven has held the appointment as Surveyor for the Hereford Archdeaconry since 1935.

PRACTICES AND PARTNERSHIPS

Mr. James S. Bramwell [F] has joined the firm of **Barnard and Smith** as from 7 June, and correspondence should in future be addressed to him at 50 Knightsbridge Court, Sloane Street, S.W.1. (SLOane 0351/2/3/4.)

Lt.-Col. Walter E. Cross [F] and his daughter, **Miss Elizabeth M. Cross [A]**, who have been practising as Partners-at-Will since April 1947, announce their association as **W. E. and E. M. Cross [F/A]**, and will continue practice in partnership from The Studio, Osterley Road, Isleworth, Middlesex. (HOUslow 5717.)

Messrs. Daniel Watney, Eiloart, Inman and Nunn have taken into partnership **Mr. H. A. J. Darlow [A]**, and **Mr. G. W. Mathews, M.A., A.R.I.C.S.** The firm will continue to practise under its present name.

Mr. H. Dessau [A] is setting up his practice in Nottingham in August and would be pleased to receive trade catalogues, etc., at 'Freiston', 12 Lucknow Drive, Mapperley Park, Nottingham.

Mr. P. W. Edwards [A], surviving partner of the firm of **Walter Rudman and Edwards**, 32 Market Place, Chippenham, has taken into partnership **Mr. D. A. S. Webster, M.A. [A]** as from 30 June 1948. From that date the name of the firm is **Edwards and Webster**, and the

practice will be continued from the same address.

Messrs. Elliott, Cox and Partners, of 172, Buckingham Palace Road, London, S.W.1 (SLOane 9238) (of which the partners are **Mr. F. Cox [F]**, **Mr. S. T. G. Elliott, F.R.I.C.S.**, **Mr. W. T. Roxburgh, A.R.I.C.S.**, **Mr. E. Holmes [L]** and **Mr. A. V. J. Kirkham [F]**), have taken **Mr. M. R. Dumville [A]** into partnership from 1 July 1948, the style and address of the firm being unchanged. **Mr. M. R. Dumville** has closed his practice at 15 Elizabeth Street, London, S.W.1.

Mr. Julian Leathart [F] has taken into partnership **Mr. John P. Tingay [A]**. They will practise under the style of **Leathart and Tingay** at 49 Welbeck Street, London, W.1. (WELbeck 0555.)

Mr. W. R. T. Miller [L] is now practising from 'The Garth', Batchworth Hill, Rickmansworth, Herts. (Rickmansworth 4554), and will be pleased to receive trade catalogues, etc.

Mr. K. Pitchford [A] will be pleased to receive trade catalogues, etc., addressed c/o City Engineer and Surveyor, Town Hall, Bradford.

Mr. John W. Poltock [A] having resigned his appointment as Senior Assistant Architect with the Kent County Council, has commenced private practice at Gable End, Loose, near Maidstone, Kent. He will be pleased to receive trade catalogues, etc., and particularly wishes to hear from firms exporting to Egypt, who may be interested in the supply of building materials and equipment necessary for the erection of a new building at Maadi for Victoria College, Cairo.

Mr. J. M. Scott [F] and **Mr. R. J. Turner [A]** have entered into partnership and will practise at Halifax Chambers, 20/22 London Road, Southend-on-Sea, where they will be pleased to receive trade catalogues, etc.

Messrs. Searle and Searle (partners **Mr. Norman O. Searle [A]**, **Mr. L. K. Hett [F]**, **Mr. Eric C. Kent [A]** and **Mr. John C. Casey [L]**) have taken into partnership **Mr. David O. Searle [A]**. The address at Amen House, Warwick Square, London, E.C.4 (CITY 1639) remains unchanged.

Mr. Gilbert J. Trigg [L], who was in partnership with **Mr. Norman Atkins [F]**, practising under the style of **Norman Atkins** at 62 West Street, Fareham, Hants (Fareham 2332) has taken over the practice of **Norman Atkins** and will continue to practise at 62 West Street, Fareham, Hants.

Mrs. Rachel J. Wilson [A] would be pleased to receive trade catalogues, etc., relating to internal finishes, fittings and equipment, especially industrial, at 24 The Pryors, East Heath Road, London, N.W.3 (HAMpsstead 3491).

Mr. W. W. Wood [F], who, as announced in the June JOURNAL, has entered into partnership with a South African firm (**Messrs. Corrigan, Crickmay and Partners**), disposed of his Indian practice to Dr. U. Episcopo, of Bombay, with effect from 1 January 1947.

CHANGES OF ADDRESS

Mr. David E. Cosedge [L], formerly of 42 Broomfield Road, Surbiton, Surrey, has removed to 30 Bolton Avenue, Hampton, Melbourne, S.7, Victoria, Australia.

Mr. J. J. de Segrais [A] has removed from 35 Tavistock Square, London, W.C.1, to 25 Duke Street, Manchester Square, London, W.1 (WELbeck 8932) and will be pleased to receive trade catalogues, etc., at that address.

Mr. W. J. Harvey [A] has removed from 155 Queen's Drive, Finsbury Park, London, N.4, to 50 Court Road, Eltham, London, S.E.9.

Mr. W. J. Whiteside [A], whose new address is c/o Kimberley Club, Kimberley, S. Africa, will be pleased to receive trade catalogues, etc.

As from 1 July the address of **Mr. R. Wallace-Bateman, O.B.E., M.C. [F]**, is Building Research Station (Dept. of Scientific and Industrial Research), Garston, near Watford, Herts.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate (34) with varied experience of general practice seeks partnership or position with view to partnership in London or Northern outskirts of London. Box 155, c/o Secretary, R.I.B.A.

Associate (50) seeks partnership where initiative, experience and capital will be appreciated in active existing office, preferably in W. or N.W. London. At present sole architect to a Conversion Company. Extensive all-round pre-war experience, particularly in planning, housing schemes, flats and offices abroad. Box 158, c/o Secretary, R.I.B.A.

Fellow (36), wide experience, seeks partnership or position with view to partnership or would purchase practice. Preferably South-West, South or South-East England. Box 160, c/o Secretary, R.I.B.A.

For Sale. Country practice within 8 miles of Oxford. Offices available with room for expansion. Box 162, c/o Secretary, R.I.B.A.

Old-established practice in centre of sea-side resort on South-West coast for sale. Box 163 c/o Secretary, R.I.B.A.

ACCOMMODATION

Fellow requires two rooms in West End or West Central area of London with use of clerical assistance if possible. Would consider joining practice with member in similar position. Box 161, c/o Secretary, R.I.B.A.

Fellow requires limited office accommodation in Bournemouth, Poole or Wareham at moderate rent. Willing consider sharing with another. Box 157, c/o Secretary, R.I.B.A.

WANTED AND FOR SALE

Wanted. *Civic Art* by W. Hegeman and E. Peerts, and *Rome of the Renaissance and Today* by Sir Rennell Rodd. Box 156, c/o Secretary, R.I.B.A.

For Sale. Oak plan chest (six drawers) to take plans 42 in. by 34 in. One drawing board and T-square (antiquarian size), two drawing boards and T-squares (double elephant), oak typist's table with two drawers, Mahogany pedestal desk and oak revolving chair. Box 159, c/o Secretary, R.I.B.A.

For Sale. Plan chest of six drawers, double-elephant drawing board, two T-squares (one ebony-edged), and draughting stool, all in good condition. Offers to Box 154, c/o Secretary, R.I.B.A.

Your Child's 21st Birthday

An admirable scheme for putting aside savings to provide a gift of lasting value to celebrate the occasion of your child's 21st birthday is available through the medium of an assurance company. To obtain the fullest advantages it is essential that a start be made in the earliest years of your child's life.

Please write for full particulars from the Secretary, A.B.S. Insurance Department, 66, Portland Place, London, W.1. (Tel.: WELbeck 5721.) Quote: RE/J when replying.

ss
a,
ic.
re-
ng
n-
d,

of
on
rn
ry,

ia-
ted
or
a
re-
ng,
ad.

nip
uld
est,
c/o

of
ex-

ide
163

or
of
der
ilar
.
ion
at
with
.

E.
day
ary,

ake
and
ving
oak
any
Box

ble-
one
in
c/o

y
side
e to
21st
n of
full-
t be
ld's

rom
art-
V.I.
then

NAL